# INFLUENCE OF PERSONALITY FACTORS ON THE CONSUMPTION OF PERSONAL CARE PRODUCTS

# Thesis Submitted to the COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

for the award of the Degree of Doctor of Philosophy under

THE FACULTY OF SOCIAL SCIENCE

By
ANANDAKUTTAN B. UNNITHAN

under the supervision of Prof. P. RAMACHANDRA PODUVAL

SCHOOL OF MANAGEMENT STUDIES
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY
KOCHI - 682 022, KERALA

**DECEMBER 2003** 

#### **CERTIFICATE**

This is to certify that the thesis titled INFLUENCE OF PERSONALITY FACTORS ON THE CONSUMPTION OF PERSONAL CARE PRODUCTS is the record of bonafide work done by Mr. Anandakuttan B Unnithan under my supervision and guidance in the School of Management Studies. The thesis is worth submitting for the Degree of Doctor of Philosophy under the Faculty of Social Sciences. No part of this work has been presented for any other degree from any other institution.

Kochi 22 2 December 2003 **PROF. P.R. PODUVAL** SUPERVISING GUIDE

## **DECLARATION**

I. Anandakuttan B Unnithan hereby declare that the thesis titled Influence of personality factors on the consumption of personal care products is the record of the original work done by me under the supervision and guidance of Prof. PR Poduval for the PhD programme in the School of Management Studies. I further declare that this work has not formed the basis for the award of any degree, diploma, associateship, fellowship or any other title for recognition.

Anandakuttan B Unnithan

#### **ACKNOWLEDGEMENTS**

I cherish this work for the learning it gave me and I am indebted to many who helped me in the process.

In the maze of approaches, concepts and theories, I would have been a lost soul, if not for the continuous and consistent guidance of my supervising guide Prof. P Ramachandra Poduval. His profound knowledge and varied perspectives, the innumerable sessions of patient hearing and advice, I am forever indebted to him. I hope the fruition of this study would be the best guru dakshina I can offer him.

Prof K George Varghese, member doctoral committee – a teacher who is a down to earth realist had been a pillar of support throughout my study. His encouragement and motivation had been the proverbial elixir of life when many a time I was running out of juice and slowing in the race.

Prof. KK George, my teacher, whose satire and sarcasm kept me thinking. He has a strange method for motivating people.

Prof. P Sudarsanan Pillai, Director SMS, with all the limitations of his chair, stood by me and gave sane counsel..

To my parents Mr. K Balakrishnan Unnithan and Mrs. Anandavalliamma, this was their dream. Indebted, I am, to them, for teaching me all the lessons in life to become this able, and in particular, that lesson that I shall never cease to be a learner.

My wife Sindhu and our little ones Niranjana and Nirupama who are my strength and my weakness. They are my nearest and dearest who

have gone through every trough and crest of my study, not in its content, nor in their heads, but in their hearts and in their minds. To them, my love and my return from this journey.

Mr. Manoj Menon and Mrs. Jyothi, part of my extended family; they were always with me.

Dr. Santhakumari who listened patiently to all my real and imaginary illnesses, I owe my health.

My friends, Dr. N Ajithkumar, Mr. Reji Raman, Mr. KK Krishnakumar, Mr. K Anilkumar, Mr. Sam Thomas, Mr. Siby, Dr. S. Rajithakumar, Mr. Manoj Edward and Mr. K A Zakkariaya. I always feel inadequate acknowledging them for the part they have played in my life, this study being only a part of it.

All my colleagues in School of Management Studies deserve a mention being there for me.

To the staff of office and library, and particularly Mr. Ubaid, for the good turns they have done for me, I thank them.

And to my students past and present....

# **CONTENTS**

| CHAPTER 1 | INTRODUCTION  | 1   |
|-----------|---|-----|
| CHAPTER 2 | REVIEW OF LITERATURE  | 16  |
| 2.1       | Personality and Consumer Behaviour  | 16  |
| 2.2       | Self-theory and consumer behaviour  | 20  |
| 2.3       | Altering the Self: towards an improved self                                 | 24  |
| 2.4       | Measurement of the Self-concept   | 26  |
| 2.5       | Self concept, Body concept and Social Comparison                            | 30  |
| 2.6       | Self-Evaluation and Social Comparison Theory                                | 32  |
| 2.7       | Self Evaluation - Evidence from research on eating disorders                | 35  |
| 2.8       | Self-awareness  | 39  |
| 2.9       | Persuasibility and consumer behaviour                                       | 42  |
| 2.10      | Personality Factors related to self-evaluation,                             |     |
|           | self-awareness and persuasibility.  | 44  |
| CHAPTER 3 | SCOPE AND METHODOLOGY   | 70  |
| 3.1       | Introduction and statement of the problem                                   | 70  |
| 3.2       | Objectives  | 70  |
| 3.3       | Theoretical background  | 71  |
| 3.4       | Scope of the study  | 74  |
| 3.5       | Significance of the study   | 7.5 |
| 3.6       | Variables in the study and measurement                                      | 76  |
| 3.7       | Hypotheses  | 85  |
| 3.8       | Pilot Study and Development of Tools  | 88  |
| 3.9       | Data Collection   | 91  |
| 3.10      | Statistical Methods and Analysis  | 92  |
| 3.11      | Limitations of the study  | 93  |
| CHAPTER 4 | DATA PRESENTATION ANALYSIS  |     |
|           | AND INTERPRETATIONS   | 94  |
| 4.1       | Sample Profile and demographics   | 94  |
| 4.2       | Factor Analysis and Data Reduction  | 102 |
| 4.3       | Relationship of variables under Factor 1 Domain                             | 115 |
|           | 4.3.1 Self-Esteem and its relationships with other variables under factor 1 | 115 |
|           | 4.3.2 Relationships among variables under Factor 2                          | 124 |
|           | 4.3.4 Relationships among variables under Factor 3 (Persuasibility Domain)  | 120 |
| 4.4       | Relationships between the surrogate variables (between factors)             | 127 |
|           | 4.4.1 Self-Esteem and CSII  | 127 |

|            | 4.4.2 Self-esteem and Public Self-consciousness          | 130 |
|------------|--|-----|
| 4.5        | Self-Esteem, Public Self-consciousness and               |     |
|            | Consumption of Personal care products.                   | 131 |
| 4.6        | Persuasibility and Use of personal care products         | 139 |
| 4.7        | Binary Logistic Regression                               | 142 |
|            | 4.7.1 Logistic Regression - an introduction              | 142 |
|            | 4.7.2 Variables and coding for Logistic Regression       | 145 |
|            | 4.7.3 Logit Results                                      | 146 |
| CHAPTER 5  | DISCUSSION OF FINDINGS                                   | 155 |
| 5.1        | Summary of Findings                                      | 160 |
| 5.2        | Discussion   | 161 |
|            | 5.2.1 Self-Evaluation                                    | 164 |
|            | 5.2.2 Self-Awareness                                     | 168 |
|            | 5.2.3 Moderating role of self Evaluation in the relation |     |
|            | between self awareness and consumption                   | 171 |
|            | 5.2.4 Persuasibility                                     | 173 |
| CHAPTER 6  | CONCLUSIONS AND IMPLICATIONS                             | 176 |
| 6.1 C      | Conclusions  | 176 |
| 6.2 Ir     | nplications  | 177 |
| 6.3 S      | cope for further research                                | 179 |
| REFERENCES |  | 180 |
| APPENDICES |  | 203 |

# LIST OF TABLES

| Table<br>Number | Name  | Page<br>Number |
|-----------------|---|----------------|
| 3.01            | Reliability of scales   | 90             |
| 3.02            | Scale parameters - Variables  | 91             |
| 4.01            | Sample break up by gender   | 94             |
| 4.02            | Urban-Rural composition of the sample   | 95             |
| 4.03            | Family Income classification  | 96             |
| 4.04            | Gender wise differences in Variables-ANOVA  | 98             |
| 4.05            | Group Sizes, Mean and Standard Deviation of variables-Gender wise                   | 99             |
| 4.06            | Use of personal care Products by family income ANOVA                                | 101            |
| 4.07            | KMO and Bartlett's Test for factor analysis   | 103            |
| 4.08            | Decision Table for Number of Factors  | 106            |
| 4.09            | Total Variance Explained by the factor solution                                     | 108            |
| 4.10            | Component Matrix  | 109            |
| 4.11            | Rotated Component Matrix  | 111            |
| 4.12            | Correlation of Self-Esteem with Locus of Control and Risk taking                    | 115            |
| 4.13            | T Test-Self Esteem by locus of control  | 116            |
| 4.14            | Cross Tabulation and Chi Square Test -Self Esteem and Locus of Control              | 117            |
| 4.15            | T test-Risk taking at levels of self esteem   | 118            |
| 4.16            | T test-Social anxiety at levels of self-esteem                                      | 119            |
| 4.17            | T test-Appearance anxiety at levels of self-esteem                                  | 120            |
| 4.18            | T Test – Body Esteem at levels of self-esteem                                       | 121            |
| 4.19            | Consumer Self Confidence at levels of self-esteem                                   | 122            |
| 4.20            | T Test - Social embarrassment and self-esteem                                       | 124            |
| 4.21            | Correlation between Public Self-consciousness and Appearance motive                 | 125            |
| 4.22            | Appearance Motive at levels of Public Self-consciousness –T test                    | 125            |
| 4.23            | Correlations between variable measuring persuasibility                              | 126            |
| 4.24            | Consumer Susceptibility to Interpersonal Influence at levels of Self-Esteem- T Test | 129            |
| 4.25            | Correlation between Self-esteem and Public Self-consciousness                       | 130            |
| 4.26            | Public Self-consciousness at levels of Self-esteem- T test                          | 130            |
| 4.27            | T test Use of personal care products and self-esteem                                | 132            |
| 4.28            | Self-esteem and appearance motive- t test   | 132            |
| 4.29            | Correlation- Public self-consciousness and Usage of personal care products          | 133 .          |
| 4.30            | T-Test: Use of personal care products at levels of public self-<br>consciousness    | 135            |

| Table<br>Number | Name  | Page<br>Number |
|-----------------|---|----------------|
| 4.31            | Use of personal care products and appearance motive for people of low self-esteem and high public self-consciousness compared to all others | 137            |
| 4.32            | Correlation between Public self-consciousness and use of personal care products at low self esteem  | 138            |
| 4.33            | Correlation between Public self-consciousness and Use of personal care products for various sub groups organized by gender                  | 139            |
| 4.34            | CSII and Use of personal care products- Correlations  | 140            |
| 4.35            | Susceptibility to Television Advertising and Use of personal care products- Correlations  | 140            |
| 4.36            | T test- Susceptibility to Television Advertising and Use of personal care products  | 141            |
| 4.37            | Dependent Variable Encoding: logistic regression  | 145            |
| 4.38            | Categorical variable encoding: Logistic regression  | 146            |
| 4.39            | Logit results summary of cases  | 146            |
| 4.40            | Classification Table- logistic regresion  | 147            |
| 4.41            | Value of -2LL with only constant in the model   | 148            |
| 4.42            | History of Iterations – Logistic Regression   | 149            |
| 4.43            | Significance of Model Coefficients-Logistic Regression  | 150            |
| 4.44            | Model Summary-Logistic Regression   | 151            |
| 4.45            | Hosmer and Lemeshow Test  | 151            |
| 4.46            | Contingency Table for Hosmer and Lemeshow Test  | 151            |
| 4.47            | Coefficients and significance of variables  | 153            |

## LIST OF CHARTS AND DIAGRAMS

| Chart Number | Name   | Page number |
|--------------|--|-------------|
| 3.01         | Theoretical model of the study                   | 74          |
| 4.01         | Scree plot for determining the number of factors | 105         |

#### CHAPTER 1

#### INTRODUCTION

The life of common man today is inextricably linked to business. Business serves not only as a provider of income by means of employment, but also as the provider of innumerable products and services, which sustains and enhances the quality of life. Commercially available products find their way into every day life through the market mechanism. Physiological, sociological and psychological needs are addressed by the savvy business professionals to sell their merchandise. In an extremely competitive environment, businesses are vying with each other to create and retain customers. Marketing as an organizational orientation as well as a function always looks at ways and means of enhancing the profitability by satisfying the customer needs better than the competition. In this process a plethora of choices are available to the customer in terms of different products, brands and variants.

In an ideal situation, customers are expected to make informed choices that maximize their benefit. However in practice, the rationality ascribed to the customer in his choice behaviour is often a myth. There is subjectivity of choice and there are wide differences in consumption patterns. There is every reason to believe that consumers may buy products on impulse than on considered thought, on hope than on reason. It is seen that Consumers often buy products, which they did not intend to, buy much more

than they essentially require, pay a premium for subjective and intangible benefits, and place an emphasis on the feel good factor than the functional utility. Some times consumption is used as a surrogate behaviour to meet many a psychological and sociological need and the symbolic meanings of consumption is well documented in consumer behaviour research. Consumption is often habitual, and is often irrational. However, consumption cannot be seen as a random process. If it is madness there is a certainly a method to it. Every study on consumer behaviour aims to unravel the methodical patterns in consumption.

To a great extent, the high-pressure persuasion strategies used by the marketers succeeds in influencing the individual modifying the perceptions, attitudes and affects in favour of the promoted product and brand. Kotler (1994) argued that marketing cannot create needs and needs preexist marketers. However he added that marketers along with other influencers in the society influence wants. An astute marketing professional knows how to manipulate the need and want system to effect a sale.

The intrusiveness of organized marketing is so all-pervasive that it emerges as one of the most potent social forces that shapes human behaviour in modern day society. Berman (1981) suggested that the institutions of family, religion and education have grown noticeably weaker over the past three generations and in the absence of traditional authority, advertising has become a social guide, which lays down ideas of style, morality and

behaviour. An individual is exposed at a very early age to the intensive persuasion of marketers through advertising, sales promotion, merchandising and publicity that one can safely say that significant part of the socialization is occupied with learning to be a consumer- consumer who is more materialistic and prone to conspicuous consumption.

McLuhan (1951) wrote about the age in which many thousands of the best trained minds who made it a full time business to get inside the collective public mind in order to manipulate, exploit and control which is more true in this millennium about marketing. Consumers are persuaded to buy more and use more – more than what is justified. They are persuaded to define their identity in terms of their possessions and to modify their social image by the consumption of products. On a more profound level, this is done in order to induce people to keep being productive in order to keep consuming more so that the economic wheels of progress keep moving forward. Galbraith (1967) offered the following argument. In the absence of massive and artful persuasion that accompanies the management of demand, increasing abundance might well have reduced the interest of the people in acquiring more goods consistent with the theory of diminishing marginal utility. Consumers not being pressed by the need to consume more, they might need less income and might work less reliably. This consequence is undesirable for the industrial system. Pollay (1986) argued that the maintenance of the propensity to consume is accomplished by channelling psychological needs and aspirations into consumption behaviours. The intent of persuasion and more specifically advertising is to preoccupy the society with material concerns, seeing commercially available goods or services as the paths to happiness and solutions to all possible problems and needs.

Pollay (1986) added that commercial persuasion appears to programme not only the shopping and product use behaviour, but also the larger domains of social roles, language, goals, values and the source of meaning in the culture. Contrary to Gauthama Budha's tenet; 'Desire is the cause of all sorrows' marketing suggests that desire is the fountain head of life and consumption is the path to find meaning in life.

The persuasion mechanism in marketing uses advertising as the front-end, which succeeds by exalting the materialistic virtues of consumption. This is done by exploiting achievement drives and emulative anxieties, employing tactics of hidden manipulation, playing on emotions, maximizing appeal and minimizing information, trivializing, eliminating objective considerations, contriving illogical situations, and generally reducing men, women and children to the role of irrational consumers. MacBride (1980)

Pollay (1986) commented that the proliferation and intrusion of various media into the everyday lives of the citizenry making advertising part of the natural environment, persistently encountered and involuntarily

experienced by the entire population. The consumers are surrounded by the marketing efforts no matter where they turn, intruding into the media, the streets, the rituals, the celebrations and festivals and into the very private and personal lives.

Advertising, sales promotion, direct marketing, door to door selling, public relations and publicity campaigns; all this contribute to the intrusive nature of organized marketing which takes the form of an all out warfare to conquer the limited mind-space of the customers and thereby their wallet. Expecting the consumer to take a rational decision based on objective considerations in this context is a very optimistic and naive presumption. Then how do consumers take decisions and what are the factors that influence this decision making process? These are questions to which answers are sought by the researchers in consumer behaviour.

Schiffman and Kanuk (1998) reviewed the theories in consumer decision making and summarized four alternative views popular in consumer behaviour literature. They are the economic view, the passive view, cognitive view and the emotional view. According to the early economic perspective, the model of an economic man is popular in the literature, where the consumer is hypothesized to make rational decisions. The consumers compare the different alternatives and select that alternative that the utility. However, this view is criticized on the following grounds. To take a rational decision, a consumer would have to be aware of all available product

alternatives, be capable of correctly ranking each alternative in terms of its benefits and disadvantages, and be able to identify the one best alternative. It is contented that the consumers rarely have all the information or sufficiently accurate information or even an adequate degree of involvement and the motivation to take the extensive efforts required to take a rational decision. It is suggested that the classical economic man model is unrealistic on the following grounds. 1) People are limited by their existing skills, habits and reflexes. 2) People are limited by their existing values and goals. 3) People are limited by their extent of knowledge. Therefore instead of looking at the best decision which is an clusive ideal, people are satisfied with a good enough decision. Economic man model is too much of an idealistic and simplistic approach to consumer behaviour and it suggest how consumers are supposed to behave rather than how they actually behave.

The second approach is the so called passive view which depicted the consumer as passive, impulsive and irrational who is susceptible to the hard selling strategies adopted by the marketers. This approach is very popular with the sales oriented and salesmanship oriented theories. However this model ignores the fact that the consumer plays an important, an equal and often dominant role in purchase situations. In modern day sales theory, the emphasis is placed more on the dyadic relationship between the buyer and the seller.

According to the cognitive view, consumers are hypothesized to be problem solvers who take decisions based on information processing making use of cognitive processes. This model is very popular in consumer behaviour theory, which strikes middle ground between the extremes of economic view and passive view. Further this model also takes into its frame work sub-optimal decision making like satisficing, short cut decision rules like heuristics etc. Here the consumer is seen as an information processor who is involved with the act of purchase-who actively seeks out information and takes decisions based on available information.

The fourth model is that of an emotional man who takes decisions based on subjective likes and dislikes. This view suggest that the role of emotion in purchase decision is very important. Though consumers need not be irrational, the emotional plane in decision making cannot be ignored. There is a premium placed by the consumer on the affective satisfaction he derives out of purchasing, owning and using a product above and beyond the functional utility experienced.

These four models take divergent theoretical positions, which does not mean that they are mutually exclusive. In real life, a consumer is exposed to a very complex situation, and there are several determinants of his behaviour, which is reflected ultimately in his purchase and consumption.

Involvement theory tried to explain consumer behaviour using the construct of involvement, which is the perceived importance of a product to the consumer. Depending on the perceived importance, differences may be seen in the purchase decision making process. In the case of high involvement products, the consumers are likely to be more rational and the information search behaviour and problem solving is more conspicuous. The central route to persuasion theory outlined by the Elaboration likelihood Model is seen to work well in the case of such products.

However there are low involvement products where consumers are influenced more by subjective likes and dislikes and the affective response is more of a likely explanation. Generally, marketers use audiovisual media, create commercials with emotional appeals, and go for repetitive reinforcement schedules to facilitate learning.

Baumgartner (2002) acknowledged that there is tremendous complexity in consumer behaviour. There may be several aspects both rational and emotional that may act together in influencing the purchase decision. Therefore, purchase decision making also show enormous variety and simple models may not be useful for understanding purchase behaviour.

Baumgartner (2002) proposed a new typology for purchase behaviour whereby eight distinct categories of purchase behaviour were identified. They are listed below.

Extended purchase decision-making is purchase based on objective, logical criteria and for utilitarian reasons. Symbolic purchase behaviour is buying a brand to project a certain image or because it meets with social approval. Repetitive purchase behaviour – this is making routine purchase or buying some thing since one is habituated and may be loyal to that. Hedonic purchase behaviour is buying some thing just because one likes it. Promotional purchase behaviour – this is buying some thing because it is available on sale or some sales promotion schemes are available. Exploratory purchase behaviour is buying some thing out of curiosity or because of a desire for variety. Impulsive purchase behaviour is the last category, which is purchasing some thing on impulse.

Whatever is the theoretical model; there is an agreement on the fact that there is consistency in consumer behaviour even amidst the seemingly random responses. The basic tenet in marketing is that every consumer is unique and different. There are individual differences in the consumer response towards marketing stimulus. However there are patterns of behaviour, which may be generalized across people and situations, and these patterns help in understanding the complexity of consumer behaviour in a better manner. Patterns of individual differences in behaviour are studied using personality variables in psychology. Is it possible to explain the differences in consumption with the help of personality factors? It is likely that there is a group of people by virtue of their personality profile shows a

propensity to consume more. There may be link between personality and consumption, which is worth exploring further.

In the case of high involvement products, the purchase and consumption are occasional and spread out in terms of time. The low involvement products are often low-ticket items whose purchase and consumption are a part of the daily life and routine. Therefore, the presence of consistent patterns if any must be more conspicuous in the case of such products. Among such items, personal care products occupy an important position. The market for personal care products is growing rapidly especially in the last two decades. There are many brands; sub brands and variants in each product category and the volume of advertising if not the volume of sales make it such an interesting market to undertake research. This study is an attempt to explain differences in consumption of personal care products with the help of personality factors.

Personal care product is a loose term that represents a category of products which show a lot of diversity. It is important to clarify the meaning of the term in research. Personal care products may be understood as those commercially available products that are purchased by an individual for personal use, particularly for external application on the body. A personal care product may be defined as any of several preparations (except soap) that are applied to the human body for beautifying, preserving, or altering the appearance or for cleansing, colouring, conditioning, or protecting the skin,

hair, nails, lips, eyes, or teeth. The products like talcum powder, shampoo, fairness creams, moisturizing creams, moisturizing lotions, deodorants and perfumes are common examples.

There are several schemes for classification of personal care products. Terms like skin care products and hair care products are such classification schemes in common use. Sauer (2001) reporting on the industry trends in personal care and cosmetic industry, used a classification scheme of deodorants, hair care products, colour cosmetics, men's grooming products, oral hygiene products, fragrances, skin care products and sun care products. Another scheme, which is quite suitable for classification especially in Indian market context, is that of dividing the personal care products into three groups namely personal hygiene products, personal grooming products and cosmetic products.

Personal hygiene products as the name suggest are used more or less ritually to ensure personal hygiene and as such use of these products is a part of daily life and routine. Toilet soap and toothpaste are two such products the use of which is so commonplace that the decision of the consumer is not whether to use or not, but which brand or variant is to be selected. It is also possible to include products like sanitary napkins in this group. The individual, differences are therefore more with regard to customer preferences for brands and variants rather than to the product per se.

The second groups of products coming under personal grooming products exhibit enormous variety, some of which even blur the thin line with cosmetics. In fact, it will be difficult to segregate certain products into the grooming and cosmetic clusters. But generally products like talcum powder, fairness creams and lotions, moisturizing creams and lotions etc that come under the skin care product group, shampoos and hair oils that come under hair care groups and deodorants as a third grouping all may be included under personal grooming products. There are also some gender specific products like shaving creams, lotions and gels for the males and hair removers for the females.

Cosmetics are a third category, which include lipsticks, eyeliners, eye shadow, mascara, different types of blushes, face packs, and a variety of products that are applied on the body and the face for make up by the individuals and often by a professional beautician at a beauty parlour. Many niche products are available for the beauty treatment, which is used by the beautician. Manicure, Pedicure, facials, hair styling, massage etc- all these beauty treatments use commercially available products. However, the recent trend is that these niche products are also available over the counter and are purchased for beauty treatment at home. Ready to use face packs with different compositions for different types of skins and different applications, foundation creams, deep cleansing solutions, etc are available at retail, which is purchased and extensively used by the customers at home.

Among these product categories, as it is already mentioned most personal hygiene products are used extensively and routinely by the customers that the pattern of individual differences are more conspicuous in consumer preferences for brands and variants rather than towards products per se.

In the case of cosmetics and beauty treatment products, they are purchased and used selectively by the individual for make up on selected occasions. Unlike the western markets, where careful make up is a part of working life and social life, in India the use of these products are often restricted to special occasions like marriages and parties. On general terms, the consumer in our state does not spend a great deal of effort to apply make up carefully in every day life. The consumption of cosmetics is heavily skewed, and women account for the major share influenced by the cultural patterns of behaviour. Individual differences in consumption attributable to personality factors may be more conspicuous in the case of personal grooming products irrespective of the gender.

Among the manufacturers of personal care products, many base their marketing strategy on the use of fear appeals- trying to invoke the fear of social embarrassment because of deficiencies in appearance. It is a much too common strategy adopted by the manufacturers of deodorants, fairness creams, anti-dandruff shampoos, moisturizing creams etc. Likelihood of social embarrassment is also used as a threat in the case of those products like remedies for pimples, acne, excess body hair and so on. They suggest

that appearance is an important aspect that determine social acceptance and the use of such personal care products can improve one's appearance leading to a better social acceptance. Typically, it is suggested with the help of dramatic visual presentations in audiovisual media that one may be embarrassed because of minor deficiencies of skin or hair evoking the fear appeal. However, not all is lost, and there is a surefire remedy-a panacea in the firm of the company's product.

In fact appearance, looks or physical beauty do have an important place in determining social acceptance, approval and ultimately social success. For a layman, personality is synonymous with an attractive physical presence. Attractive appearance definitely influences the interpersonal dynamics at least in the initial stages of the inter-personal interaction. It is not possible to have an ideal yardstick of beauty to which individuals can be compared and scored on a scale of desirability. The common dictum is 'beauty lies in the eyes of the beholder'. However there are certain norms, which are perpetuated by the society that become an integral part of the cultural conditioning. Having fair skin is accepted as a measure of beauty throughout India. While long hair, a slim body, a blemish less skin, proportioned body etc are equated to feminine beauty, the handsome men are understood as tall, fair and muscular. There are social ideals not only in terms of character, but also in terms of physical build that people aspire to possess. These ideals are promoted by the media, literature, cinema as well as the ubiquitous beauty contests. The models shown in the media, particularly advertisements are seen as the ideal one would aspire to be.

Since personal care products promise to hide or remove deficiencies and lead to an improvement in appearance, they meet not only the functional utility aspect but also the very important social need. Here certain products like toothpaste and toilet soap, as it is already mentioned are almost universally consumed. Most cosmetics are used only on special occasions and the effect of gender here may obfuscate other influences. However there are a great number of personal care products, specifically grooming products which are used extensively and there are patterns of consistency in their use. It is felt that the individual differences in the use of personal care products may be explained by the underlying personality factors and therefore this research was undertaken with this primary objective. The relationships between the personality factors may also reveal the process involved in making some individuals more prone to the use of such products. The knowledge of the interaction between the personality variables leading to differences in consumption will prove to be valuable from a marketing perspective. Segmentation using psychographic variables, positioning brands, developing communication campaigns targeted at the heavy users; are all potential benefits from the knowledge related to this area.

## **CHAPTER 2**

#### REVIEW OF LITERATURE

### 2.1. Personality and Consumer Behaviour

There has been a number of efforts in the past trying to link personality with consumer behaviour, many of them proving to be disappointing. Decades of personality and attitude research reportedly failed to empirically identify robust relationships between traits and behaviours. Mischel (1968 page 80) argued, "highly generalized consistencies have not been demonstrated, and the concept of personality as broad response predispositions is thus untenable". He disparagingly used the term 'personality coefficient' to describe the very modest correlation coefficients between 0.20 and 0.30 obtained in many studies when personality dimensions were related to external criteria.

Kassrjian and Sheffet (1981) are two vehement critics of personality research in consumer behaviour. They reviewed several studies focusing on the role of personality in consumer behaviour and concluded that the research was equivocal.

Haugtvedt, Petty, Cacioppo and Steidly(1988) referred to the criticism that personality research in consumer behaviour tended to employ shot gun approaches in which predictions were often based on few or no specific hypothesis or theoretical frameworks.

Baumgartner (2002) wrote that personality research has long been a fringe player in the study of consumer behaviour and suggested that the field is balkanized and is in a state of disarray. Further, there is proliferation of trait measures leading to a 'Babel' of concepts and scales.

Kassrjian and Sheffet (1991) pointed out several shortcomings to explain the disappointing results. They reported that instruments originally intended to measure gross personality characteristics such as sociability, emotional stability, introversion or neuroticism have been used to make predictions of the chosen brand of tooth paste or cigarette.

Page (1993 page 514) referred to the paradox of personality in marketing in the following words "We all have a personality, but we do not know how it is systematically linked to our consumer behaviour".

In fact, almost every work on personality and its link with consumer behaviour refers to the seminal works of Kassrjian and Sheffet (1971, 1971 and 1991) citing their admonitions. However, several researchers chose to differ with this gloomy perspective. Albanese (1993) referred to the dark ages represented by the negative attitude researchers had towards the role of personality in consumer behaviour and cited Kassrjian and Sheffet (1991) as the most representative work of this genre. He criticized this pessimistic view and particularly the authors citing the fact that the work of Kassrjian and Sheffet originally published in 1971 was

republished in 1981 and then again in 1991 with out any consequential differences, and suggested that the authors have summarily dismissed two decades of research without a fair trial.

The renaissance in personality research in marketing came about in eighties and nineties when the researchers refocused their attention on personality. Foxall and Goldsmith (1989) and Albanese (1993) passionately argued for new impetus in personality research. Mooradian and Olver (1994) attempted to relate the well-known personality construct neuroticism with affect and post purchase processes with reasonable degree of success. They believed that while specific behaviours of the consumer may not be predictable with individual personality traits, personality does relate with aggregated behaviours and with cognitive criteria in more complex patterns.

Haugtvedt, Petty, Cacioppo and Steidly(1988) explored the relationship between Need for cognition – a personality variable with advertisement effectiveness and reported that the results are noteworthy.

Many of the modern efforts to study personality as an important factor to explain consumer behaviour followed either of the two approaches described below. One explanation commonly suggested for the apparent lack of relationships between personality variables and consumer behaviour is that the personality variables were borrowed from psychological research especially clinical settings where the context is very different. Therefore, it

made sense according to some researchers to develop constructs unique to marketing. Crosby and Grossbart (1984) in a review of such efforts listed variables such as opinion leadership, deal proneness and purchase impulsivity. Bearden et al (1989) who developed Consumer Susceptibility to Interpersonal Influence (CSII) scale did considerable work along these lines.

A second approach was to take a group of personality factors and relate them to an index of aggregated behaviours over different situations and different products. This method was facilitated with the emergence of sophisticated multivariate analysis methods like Logit and Probit regression, Structural equations Modeling (SEM) etc.

The availability of powerful computer hardware and specialized software also promoted this approach.

However, again very little efforts have been made to explain individual differences in the act of consumption using personality variables. The common scheme is to take the dependent variable as attitude measures indicative of behaviour, or other similar variables like customer satisfaction, brand loyalty etc. The reasons are obvious. A customer may be favorably disposed to a product or brand, which may not result in actual purchase or consumption since a set of situational factors moderate this process.

Conceptually, it may not be farfetched to believe that there are relationships between the personality of the consumer and his product

choices. In every theoretical approach to the study of personality in consumer behaviour, this theme is found to recur consistently.

From the perspective of psychoanalytical theory, human drives are largely unconscious and hence consumers need not be aware of their true reasons for buying what they buy. Consumer purchases and consumption are therefore a reflection and an extension of consumer's own personality. This idea was further developed in the self-theory taking it away from the realm of Freudian psychology.

#### 2.2 Self-theory and consumer behaviour

Rosenberg (1979) conceptualized self as the totality of the individual's thoughts and feelings having reference to himself as an object. It is the objective of view of oneself where an individual turns around and evaluates in an objective manner who or what he or she is. Mehta and Belk (1991) warned that there could be differences in concepts of self across different cultures. They reported in a study on the Hindu immigrants of United States that Hindus are less susceptible to the western view of self as both a subject and an object.

Since people have a need to behave consistently with their self-concept, the perception of self is an important determinant of the personality. It is posited that people act in a manner consistent with their self-concept and gain predictability in their interactions with others. Belk (1988) in his

seminal article put forth the view that possessions play a major role in establishing a person's identity. Possessions are indeed a part of one's self and often defines the self-concept. In today's materialistic society, the value of possessions in defining one's position in the society cannot be over emphasized. Belk (1988page 517) had noted, "We are what we have (which) may be most basic and powerful fact of consumer behaviour."

In fact, the concept of possessions to define self was suggested much earlier by James (1890 page 487). He wrote rather eloquently on self in the following words. "A man's self is the sum total of all that he can call his, not only his body and psychic powers, but his clothes and his house, his wife and children, his ancestors and friends, his reputation and works, his lands and yacht and bank account. All these things give him the same emotions. If they wax and prosper, he feels triumphant. If they dwindle and die away, he feels cut down- not necessarily in the same degree for each thing, but in much the same way for all."

According to the self-theory, perception of one's self is related to the consistency of behaviour. However there are criticisms against the self theory, especially the view that possessions are extended self. Cohen (1989) criticized Belk's theory of extended self on three grounds. He argued that the concept of self lacks clear meaning, lacks empirical support and lacks explanatory power. He particularly pointed out that the concept of self is vague and with out boundaries.

Belk (1989) countered this argument by saying that the boundaries of self are perceptual not physical or psychological.

The self-concept is understood to be composed of multiple selves. This idea of multiple selves finds extensive support amongst researchers (Markus and Nurius 1986, Sirgy 1992, Syrgy and Johar 1991, Morgan 1993). Eight different dimensions of the self-concept are described by these researchers. They are actual self, ideal self, social self, ideal social self, expected self, situational self, extended self and possible selves. The actual self refers to how a person actually perceive himself. The ideal self describes how a person would like to perceive himself. The social self is concerned about how a person believes others perceive him. The ideal social self is concerned about how a person wants others to perceive him. The expected self is how one would expect to see him at some future time. The situational self-how a person would like to act in various contexts. The extended self already mentioned above is the possessions as an extension of the self-image. Finally, there is the concept of possible selves, which refer to what a person perceive that he would like to become, could become or is afraid of becoming.

There are various studies in support of the hypothesized relationship between self-image and product consumption. Belk, Bahn and Mayer(1982) reported that there is congruence between self-image and product image for many products purchased like automobiles, health, cleaning, grooming and leisure products, clothing, cigarettes, home

appliances, home furnishing and magazines. It is suggested that people buy products primarily not for their functional benefits, but rather for their symbolic value and the perceived match with the self-concept (Levy 1959). This view of symbolic interactionism suggested that products act as symbols that help define the consumer personality. Therefore it is posited according to the 'image congruence hypothesis' that consumers select products that correspond to their self image (Onkivisit and Shaw 1987)

However, the relationship between self-concept and consumption may be obscured because of other situational factors. Burnkrant and Page (1982) noted that a major problem of the self-concept product congruence theory is that it implies trans-situational consistency in product selection. People may prefer and purchase products that are similar to a relatively stable self-concept they have about themselves. As it is presumed that this self-concept is stable across situations, it is also assumed that product choice must remain stable across situations. However, this implied cross-situation consistency of behaviour does not find support in empirical research. Sandell (1968) found that a person's choice of beverage is highly dependent on the situation and the choice may vary across contexts. Green and Rao (1972) demonstrated that consumer's choice of baked goods varied considerably across several meal situations. Belk (1975) also cited several studies and concluded that the product choice is situational.

#### 2.3 Altering the Self: towards an improved self

A natural offshoot of the self-theory is the concept of altering the self. Consumers show a disposition to change themselves for realizing the goals of being different or having an improved self; using opportunities provided by the consumption of clothing, grooming products, cosmetics etc. This alteration can be by creating a new self, maintaining the existing self or preventing the loss of existing self.

Closely related to this concept is the idea of personal vanity. Netemeyer, Burton and Lichtenstein (1995) conceptualized personal vanity as an individual difference variable composed of two dimensions namely physical vanity and achievement vanity. Physical vanity is an excessive concern for a positive view of one's physical appearance. Achievement vanity is defined as an excessive concern for one's personal achievement. They found this construct being related to materialism, use of cosmetics, concern with clothing and country club membership.

The concept of consuming for self-alteration is extensively researched and reported in consumer behaviour literature. Schouten(1991 page 248) suggested that the incompleteness in an individual drives him or her to consumer goods and services and called this phenomenon 'symbolic consumption for the maintenance or reconstruction of the self'. He wrote "One characteristic that make human unique among living creatures is our

ability to examine ourselves, to find ourselves lacking, and to attempt self betterment" Here self betterment in consumer behaviour means improving one's perceived self through consumption. He expected to find evidence for the self-betterment from the study of one 'extreme form' of consumption - aesthetic plastic surgery. Irreversible, expensive, painful and potentially dangerous; nevertheless cosmetic surgery is becoming increasingly popular. It is highly visible and intimately personal. Once perceived as a vain indulgence of the wealthy, it has become more widely available and acceptable to the American middle class as a potential means of self-improvement.

While cosmetic surgery is an extreme form of self betterment, there are less esoteric, but more popular methods adopted by the common man in his every day life for self improvement. Use of personal care products and cosmetics is such a method. They are primarily purchased and used to effect an improvement in the appearance or to maintain the appearance. It is reasonable to assume that the differences in consumption of such products be related to the self-concept, and the concept of self-betterment or self-alteration may be useful to explain the individual differences in consumption.

Now the use of personal care products is a means to improve one's physical attractiveness like elective cosmetic surgery. In both the cases, the result is an improvement in the physical attractiveness of the body of the individual. It is well documented in research that an attractive body is perceived as a valuable personal attribute that facilitate success in social, romantic and even economic endeavours (Berscheid, Hatfield and Bohrnstedt 1973; Brislin and Lewis 1968). Therefore, one may have a motive to improve the appearance to facilitate social acceptance and success and personal care products may be consumed to achieve these goals.

### 2.4 Measurement of the Self-concept

There is a lack of complete agreement among scholars on the idea of self-concept and its measurement. An accepted operational definition to facilitate measurement, which is an essential pre-requisite for empirical research, is difficult to arrive at in the case of self-concept.

Schouten (1991) used the term self-concept as the cognitive and affective understanding of who and what one is. Nevertheless, self-concept is used by many researchers to mean variously role identities, personal attributes, relationships, possessions, fantasies, aspirations and so on. There are many measures like self esteem, self-efficacy, self monitoring, which are conceptually similar and used for research on the self domain as operational constructs.

The schema for self-concept often lacks precision required for measurement. It is worth recalling the criticism of Cohen (1989) that the concept of self lacks a clear meaning and lacks empirical identification. Morgan (1993) wrote about the limitations found in the self-concept literature that there is lack of sound theoretical basis to facilitate

measurement. She concluded that the most studies on self concept focused on repeated empirical testing of largely 'atheoretical' models and constructs.

Echoing the same theme, Bettman et.al (1978) observed that the study of self-concept in consumer behaviour had reached the decline stage in the life cycle. Though later there was a renewed vigour in research led by Belk (1988) most of the criticisms levelled against even now holds good.

Sirgy (1982) after reviewing the early consumer self-concept studies commented that there is an ambiguity and confusion on the precise conceptualisation of self-concept in the consumer behaviour literature.

Morgan (1998) commented on this in the following words "Clearly a serious limitation of these early research is the lack of a clearly articulated or commonly accepted definition of the self-concept construct." According to her, the construct of self-concept is addressed using one dimensional, two-dimensional and multi-dimensional definitions and there is a lack of consensus. Within each of these conceptual domains, an overwhelming array of terms may be found most of them apparently addressing the same construct under different names.

Clearly there is a lack of consensus and clarity on the definition and usage of the term self-concept. In such a context, obviously any attempt to develop a reliable and valid measure would prove futile.

Most of the research in self-concept was directed at finding evidence for the 'image congruence hypothesis' which suggest that consumers select and use products that correspond to their self-concept (Onkivisit and Shaw 1987). Here a popular methodology adopted is the profiling of the self in terms of some attributes or descriptive labels and relating this profile to the product personality or brand personality, elicited through the same method.

Malhothra(1981) developed a scale to measure the self-concept adopting this approach which may be considered as a representative work of this genre of research. The scale developed in its final form was composed of 15 items in semantic differential format. A few sample items were rugged vs. reliable, rational vs. emotional, modest vs. vain etc. The responses were obtained on a seven-point scale between the semantic extremes provided as labels as above. The same scale was used to profile the self-concept as well as the product or brand personality. Malhothra (1981) reported that the reliability figures were rather low (between 0.41 and 0.65) and attributed this to the multidimensional nature of the scale. Many other such profiling methods are in vogue in the self-concept literature.

It may be seen that the measurement of self-concept involved the idea of profiling the self image on a number of attributes or descriptive labels. While this kind of an approach is suitable to establish the correspondence between the self-image and the product image, the lack of stable measures

inhibit the process of explaining the individual differences in a meaningful way. Eliciting the self-image using semantic differentials is comparable to the early approaches in personality research to identify those descriptive labels that are supposed to tap basic characteristics of the individual.

Lanyon and Goodstein (1971) based on a review of the different approaches adopted for personality assessment concluded that there are many descriptive labels or adjectives commonly found in the every day language that describe personality. The availability of these one-word adjectives rather than long phrases to describe an individual would indicate the importance of that characteristic in the culture and the society. They wrote "----- the more basic or important a particular personality characteristic is felt to be, the more likely it is to find its way into our natural language as a single word. This position is the one taken by eminent researchers like Allport(1937), Norman and Goldberg 1970. From the descriptive labels or adjectives, it is possible to develop a set of stable characteristics, which are in fact the enduring response dispositions or traits as commonly denoted. Allport and Odbert (1936) found out almost 18000 different trait names from the Webster's second unabridged dictionary while Norman (1963) was successful in listing more than 40000 characteristics. From the very large list of characteristics labels, attempts were made to come out with a few stable and enduring traits based on empirical and statistical methods.

It is clear from the above discussion that the semantic differential methods to measure the self-concept as self image is very similar to the early research on personality measurement which was the predecessor of the trait method. In such an approach, valid and reliable measures of individual differences that are amenable to further analysis is difficult to obtain since each component is not measured over repeated items. One would require stable measures of individual differences having internal consistency indicated by the reliability to develop better models linking self-concept with consumption.

Pattern matching by semantic differentials is only a beginning. Rather than reinventing the wheel all over again, it makes sense to use the individual measures that are already developed in the domain of self-theory for use in further research. These measure already demonstrated to have a high degree of reliability and validity because of repeated refinements would yield better results in prediction.

Based on the above argument, the researcher used a number of individual difference measures related to the self-domain. Though many of these measures were independently developed according to different perspectives or schools of thought in psychology, they may be integrated into the self-theory domain easily.

## 2.5 Self concept, Body concept and Social Comparison

The sense of self is dynamic which is shaped by an individual's interaction with the environment. An important part of this self-concept is the

body concept which is one's perception of his or her body and its attractiveness. Since personal care products are used to effect an improvement in one's appearance in terms of the body, body concept may explain their use.

A consumer is exposed to countless media messages and images every day. Most of these media images present an idealized version of life rather than the way life is actually lived. Richins (1992) noted that one important characteristic possessed by the idealized media images is the depiction of highly desirable circumstances that can be achieved by only a few members of the society and that too occasionally. The level of beauty and the physical attractiveness possessed by nearly all actors and models shown in the media are available only to an extremely small segment of the population. Collectively media images present an undemocratic and biased view of life. They do not represent a representative cross section of the life as it is actually lived. Advertisements are a major culprit here in projecting an idealized view of life.

Richins (1992) cited the work of Jordan and Bryant (1979) who analyzed the portrayal of couples in magazine advertisements and found that neither there are old, poor, sick nor unattractive couples depicted in the five hundred odd advertisements sampled in the study.

Belk and Pollay (1985) found that the level of wealth or material comfort displayed in many advertisements is way beyond that available to middle class households.

Richins (1991) noted that the idealized images affect satisfaction with the self through social comparison. People desire to know more about them; one way to know more about one's self is to compare with others. It was suggested that the most frequent social comparison in the present society is with media images, which is often unsought. Advertisements and entertainment media images are pervasive, providing many opportunities for comparison with respect to material possessions, level of attractiveness and other criteria. Since most of the media images are idealized, the comparison ends up being upward and the comparer finds himself or herself deficient with respect to the comparison standards. This might lead to negative selffeelings or reduction in self-esteem. These negative self-feelings serve a motivating function (Higgins 1987, James 1948) and people strive to eliminate the negative feelings and repair their sense of self-worth. One of the most obvious methods of doing this is by consumption-consumption of these goods and services that promise self-enhancement. Personal care products are such offerings.

## 2.6 Self-Evaluation and Social Comparison Theory

Festinger (1954) proposed the social comparison theory with three major prepositions.

People have a drive to evaluate their opinions and abilities.

In the absence of objective bases for comparison, this need can be satisfied by social comparison with other people. Such social comparison will when possible be made with similar others.

It was suggested that the objective of social comparison was selfevaluation. Here self-evaluation can be defined as the judgment of values, worth or appropriateness of one's abilities opinions and personal traits.

In addition to the self-evaluation, other motives for social comparison can be self-improvement and self-enhancement (Martin and Kennedy, 1994). Here self-enhancement can be similar to ego-enhancement function suggested by Festinger (1954). Self-Enhancement is defined as an individual's biased attempts to maintain a positive view of him or herself to protect or enhance self-esteem. Thornton and Arrowwood (1966), Hackmiller (1966 a,b) and Wheeler (1966) found support for the existence of this upward drive which is the self-enhancement motive.

Social Comparison can be also for reasons of self-improvement.

Wood (1989) provided some evidence in this line. Here self-improvement is

defined as an individual's attempts to learn how to improve or to be inspired
to improve a particular attribute.

All the three namely self-evaluation, self-enhancement and selfimprovement may be motives for social comparison. Whichever be the motive, social comparison has a definite effect of self-concept in general and self-esteem in particular.

In today's market place, an individual is exposed to advertising to a significant degree. Many of these advertisements especially those of personal care products routinely use extremely attractive models. Comparisons with such models may result in lowered self-esteem, which might further act as a motive for improving one's appearance to match the perceived standard- that of the reference provided by the attractive model. Martin and Kennedy (1993) and Richins (1991) showed that pre-adolescents and college students do compare their physical attractiveness with those of models in advertisements and find themselves lacking.

Martin and Kennedy (1994) argued that since advertising models represent an ideal and unrealistic image of beauty, the upward comparisons resulting a lowering of the self perception of one's physical attractiveness.

Since advertising is so all-pervasive, and one cannot escape watching such advertisements that feature attractive models, comparison resulting in negative self perception is also a continual process. It may be hypothesized that people of low self-esteem may be affected more by such comparisons and they may adopt strategies to improve their self-esteem. One common such method is the use of personal care products. A similar theory has been used to explain the prevalence of eating disorders in western

societies which posit that people of poor conceptions of self suffer in comparison with attractive media images and the resultant negative self-evaluation acting as a motive to take up excessive dieting and fitness regimen leading to eating disorders.

It is important to note that self-evaluation is a powerful determinant of behaviour and pre-existent negative evaluations manifest itself as poor self concept and such people are more susceptible to suffer in upward social comparisons.

# 2.7 Self Evaluation – Evidence from research on eating disorders

The notion that the process of social comparison result in a negative evaluation of the self further manifesting in behavioural changes is used to explain eating disorders quite prevalent in the western societies. There is a lot of empirical evidence on this theme that social comparison to attractive models in media images will lead one to have distorted perceptions about a socially desirable body shape. In order to achieve this desirable body, one may resort to excessive dieting that leading to anorexia.

Prendergast (1998) made a review of the literature from the psychology and marketing areas and concluded that there is evidence pointing to the connection between the use of thin models in advertisements and the incidence of eating disorders amongst young women.

Eating disorders arise due to an individual's distorted perceptions of his or her own body image. Here the body image is often elastic, unstable and is responsive to social cues like advertising. Individuals internalize the concept of a socially desirable ideal body. The socially represented ideal body is absorbed from the cultural representations of ideals of physical beauty. Killian (1994) suggested that the western standard of beauty and physical attractiveness is thinness as can be seen in media depictions, and concluded that eating disorders like anorexia and bulimia are women's attempts to meet society's standard of attractiveness. Here the important interactions are between the body image, which is a part of self-concept, and the media portrayal of an ideal body. Dee to the social comparison process, people perceive that there is a difference between their body and the ideal and this result in negative self-evaluations.

If upward comparisons with idealized media images may result in a poor self-evaluation, the converse may be also true. People with poor selfevaluation are more likely to suffer in the social comparison. What are the personality correlates of those people who are likely to have negative selfevaluations?

If the process of social comparison resulting in poor conceptions of the self and negative self evaluations can be an explanation of the self, the same process may also explain other self-enhancement strategies focused on the body like the use of personal care products and cosmetics.

People perceive that having an attractive body is important to them and that partly looks determine social acceptance and success. There are however no absolute yardsticks on what constitutes attractiveness. The concept of beauty varies across cultures and over history. Nevertheless, there is the evolution of a uni-cultural world brought about by the increasing economic integration that may lead to the evolution of an ideal beauty concept shared across cultures. Whether this may or may not be the future, there is enough evidence that across cultures, people adopted methods to improve their appearance to come closer to the culturally prescribed norm of attractiveness. In certain ethnic cultures, this has taken extreme forms like tattooing, ritual body scarification, painful constriction of waist and torso etc. (Schouten 1991). These extreme forms are not only observed in certain isolated tribal groups, as many people would expect. In India, traditionally women pierce their ears and nose and wear studs and rings. In Kerala traditionally even men used to pierce their ear and nose to wear ornaments. While normally this is done in early child hood and the decision is taken by the parents, many women are known to pierce their ears in more than one place in their adult hood.

In the American society, it is reported that the concept of beauty involves having a slim body especially among women. Beautiful females were expected to be slim (Garner et.al 1980, Horwath 1979, Wiggins, Wiggins and Conger 1968). This idealization of slimness has resulted in an

obsession and national preoccupation with dieting and exercising for cosmetic benefits rather than fitness.

In addition, the body and the possible adornments of the body can be particularly relevant as avenues of self-expression. Hirshman (1987) studied the impression management adopted by people using commercial products. It is suggested that people may have a 'marketing character' by which they manage their lives as commodities and perform in the society in a way to increase their own socio economic exchange value. People may use products and services to improve their appearance in order to further their chances of success in social roles.

From this evidence, it is reasonable to conclude the following.

There is congruence between the self-concept and the consumption of products.

People actively seek self-betterment by self-alteration to fit in better with the society's prescribed standards.

An important aspect of the self-being the body and the perceptions of its attractiveness, self-alteration is directed towards improvement of one's appearance.

Since one of the major reasons for the consumption of personal care products is improvement in the appearance, it must be possible to

explain the differences in consumption using the individual differences in the self-concept.

Upward social comparison with idealized media images and culturally prescribed standards result in a negative self-evaluation which may in turn serve as a motive for self-alteration.

Self-evaluation is a powerful determinant of behaviour and preexistent negative evaluations manifest itself as poor self concept and such people are more susceptible to suffer in upward social comparisons.

The personality factors that determine propensity for poor selfevaluation need to be identified and these factors might explain differences in consumption of personal care products.

Several such personality variables were identified that may explain poor self-evaluation. Some of them were general factors like self-esteem, locus of control, social anxiety and risk taking, while others were specific measures either developed for use in consumer behaviour research like consumer self-confidence or measures related to the body and appearance like body esteem and appearance anxiety.

#### 2.8 Self-awareness

Kant considered self-knowledge as the beginning of all human wisdom. According to Hector (1971) cited by Eysenck, Arnold and Meili

(1975), self-knowledge is an important determinant of behaviour. Self-concept research has shown that what each individual knows about himself and how he sees himself, derives from the way in which he has been and is considered by others. Self-awareness is the precursor to self-knowledge. Argyle (1969) speculated about the impact of the impact of self-awareness on social interaction and Duval and Wickland (1972) have elaborated on an entire theory of self-awareness. A heightened self-awareness can be induced in an individual; with the help of mirrors, cameras or the presence of an audience and this state has resulted in many changes in behaviour as reported. Experimental manipulations of the self-awareness have affected such diverse behaviours as aggression (Scheier, Fenigstein and Buss, 1974), attribution (Duval and Wickland, 1973) and self-esteem (Ickes, Wickland and Ferris 1973)

Self-awareness is understood to have two dimensions namely subjective self-awareness and objective self-awareness. According to Wickland (1975), when a person's attention is focused on the environment, he is in a state of subjective self-awareness. However, when his attention is focused on himself, then he is in a state of objective self-awareness. The effect of objective self-awareness in the emotional sphere was studied by Scheier and Carver (1977). Burnkrant and Page (1982) studied the effect of self-awareness in consumer behaviour and posited that self-awareness may influence product choice. Wegener and Wallacher (1980) reviewed the

research in self-awareness and wrote that self-awareness lead to a self regulation process that controls the intensity and direction of ongoing behaviour. Specifically, self-attention is presumed to evoke a matching to standards process, whereby the person conforms to whatever he or she takes as the standard of appropriate behaviour. The greater is the self-awareness, the greater is the correspondence to behavioural standards.

Fenigstein, Scheier and Buss (1975) wrote that self-examination and self-awareness enable a person to recognize his conscious thoughts, motives and defences. They wrote that the research on self-awareness has focused on the process of self-focused attention, when a person is focusing on his thoughts, feelings, behaviours or appearance; when he is reflecting, fantasizing or day dreaming about himself; or when he is making decisions or plans that involves himself. However, none of the previous theoretical approaches considered self-awareness as an individual difference variable. They conceptualized self-consciousness as an individual difference variable related to the self-awareness. Self-consciousness is defined as a consistent tendency of people to direct attention inward or outward. They differentiated self-awareness as a state while self-consciousness is an individual difference.

Self-awareness not only include a personal reflection on one's self, but an awareness of perceptions of others also. People who have heightened self-awareness are more likely to be conscious of their public self-image and would try to create a better impression on others Burnkrant

and Page (1982). Personal care products promise an improvement in appearance and has a public dimension. They are products for impression management. Therefore, individual differences in self-awareness may explain differences in consumption also. Fenigstein, Scheier and Buss (1975) conceptualised self-consciousness as an individual difference variable having three dimensions namely private self-consciousness, public self-consciousness and social anxiety. In the study, public self-consciousness is taken as a measure of self-awareness.

## 2.9. Persuasibility and consumer behaviour

'Persuasibility' or susceptibility to persuasion has attracted a lot of research attention in both social psychology and consumer behaviour. It is observed that some people are easily persuaded than others and this tendency is a stable behavioural disposition across situations. Susceptibility to persuasion can be treated as an individual difference variable related to other personality factors.

Hovland and Janis (1959) conducted an extensive series of investigations on this phenomenon and concluded that there are 'persuasible personalities' who are easily influenced by any type of messages from any type of source. However, they also observed that the explanatory power of this construct is rather weak. Consequently efforts to find a personality correlate of persuasion shifted from looking for global personality type of

persuasibility to looking for particular aspects of the personality like intelligence and self-esteem, which may be related to the individual's likelihood of succumbing to or resisting persuasion (Worchel and Cooper 1983) One important such variable is self-esteem, which is found to explain differences in persuasibility. Cohen (1959), Gollob and Dittes (1965) and Silverman (1964) demonstrated that people of low self-esteem are more easily persuaded.

Since marketing effectiveness depends heavily on success in persuading people, there has been a lot of attention on persuasibility in consumer research. Mcguire(1968) conceptualized the construct of 'influencibility' which is consistent with the early research on persuasibility and formed the basis of specific constructs like consumer susceptibility to interpersonal influence (CSII) developed for research in marketing (Bearden, Netemeyer and Teel, 1989). The argument that global constructs of persuasibility do not have much of predictive power also influenced the development of domain specific constructs like CSII. Susceptibility to television advertising is another construct specifically developed for use in consumer research (Barr and Kellaris 2000).

Since purchases decisions are shaped by the reference group influences, which may be in the form of social influence as well as media influence, it is reasonable to expect that differences in persuasibility may have significant effect on consumption. Most personal care products promise

an improvement in appearance or maintenance of appearance. The concern on appearance does have a social dimension. The heavy users of such products are likely to be concerned about the impressions of relevant others and may show a motivation to conform to the expectations of relevant others. Therefore, it is posited that significant differences will be seen in the consumption of personal care products at levels of persuasibility. Consumer susceptibility to interpersonal influence is included in the study to account for the reference group influences ((Bearden, Netemeyer and Teel, 1989). The variable susceptibility to television advertising is included in the sturdy to account for the media influence.

# 2.10 Personality Factors related to self-evaluation, self-awareness and persuasibility.

#### Self-Evaluation

Self-evaluation can be defined as the judgment of values, worth or appropriateness of one's abilities opinions and personal traits. It is considered an important motive for social comparison. Upward social comparisons with idealized images result in poor self-evaluation and conversely people having a poor self-evaluation are more susceptible to develop negative self-perceptions and anxieties as a result of social comparison. What are the factors that may explain poor self-evaluation? Self-esteem, locus of control, risk taking, social anxiety, appearance anxiety, consumer self-confidence and body esteem are the variables that are included in the study related to self-evaluation.

### 1. Self-Esteem

Self-esteem is one of the most widely used constructs in the self-domain. It refers to the degree to which an individual values himself or herself internally on a personal level or externally as a member of a group. In fact, this construct or similarly defined constructs are given several different names like self regard, self worth, self efficacy etc. It is the evaluative dimension of one's self-concept through which an individual develop a sense of worth about himself.

Rosenberg (1965) described Self-esteem as a favourable or unfavourable attitude toward the self.

Blascowich and Tomaca (1991) defined Self-esteem as the individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes, or likes him or herself. It is an evaluative component of the self concept, a broader representation of the self that includes cognitive and behavioural aspects as well as evaluative and affective ones. Self-Esteem is reported to be associated negatively with depression, social anxiety, loneliness and alienation. Hicran (2001) reported that among adolescent patients, self-esteem is dependent upon interactions with significant others and is related to depressive affect.

A person can be regarded as having high self-esteem if he or she exhibits a respectable level of self-approval and displays confidence in his or

her daily undertakings (Bednar, Wells and Peterson 1989). Here there can be a debate on what is an acceptable level of self-esteem to be called high and what are its implications. But generally it is agreed that social success demands a self-esteem level where an individual is neither narcissistic nor self-deprecating. This careful balance may be an antecedent of social success (Rholes, Jones and Wade 1980).

Self-esteem as a construct has been extensively researched especially in the field of social psychology (Baumeister 1993, Wells and Marwell 1976). Cast and Burke (2002) reviewed many research studies and noted that since over a period of time, so much attention has been given to self-esteem that it seemed to be synonymous with self-concept in the literature on self. This is because high self-esteem is associated with positive outcomes for the individual and for the society as a whole (Baumeister 1993, Smelser 1989).

Cast and Burke (2002) suggested that self-esteem is composed of two dimensions namely competence and worth. The competence dimension also called efficacy based self-esteem refers to the degree to which people see themselves as capable and efficacious. The worth dimension or the worth based self-esteem refers to the degree to which individuals feel they are persons of value.

Research on self-esteem has generally proceeded on the presumption of one of three conceptualisations, and each conceptualisation has been treated almost independently of the others. First self-esteem has been investigated as an outcome. Scholars taking that approach have focused on processes that produce or inhibit self-esteem. Coppersmith (1967), Rosenberg (1979), Peterson and Rollins (1987) and Harter (1993) considered self-esteem as an outcome. Second, self-esteem has been investigated as a self-motive, noting the tendency of people to behave in ways that maintain or increase positive evaluations of the self (Kaplan 1975, Tesser, 1988). Finally self-esteem has been investigated as a buffer for the self, providing protection from experiences that are harmful Longmore and DeMaris 1997, Thoits 1994)

Cast and Burke (2002) agreed with the view that self-esteem is a buffer that protects the individual against negative feelings arising from disruptive or threatening experiences. Moses and Sunder (1991) experimentally demonstrated that low self-esteem is associated with a drive for thinness in afro-American women. Here chronic dieting is a strategy adopted as a coping response by the women to overcome their feelings of insufficiency with regard to the body shape induced by the social comparison process. It is reasonable to assume that, consumption of personal care products may also be used by individuals to improve their attractiveness and this might be related to self-concept and body image. Therefore, low self-

esteem increases the negative feelings and anxiety. People of low self-esteem are likely to have negative evaluations about themselves and suffer more from upward comparisons. These people are also more likely to have anxieties. It will be appropriate to consider self-esteem as a representative variable from the self-evaluation. It may be posited that since people of low self-esteem suffer more from upward comparisons and have more anxieties; they are also likely to consume more of personal care products.

## 2. Locus of Control

The concept of locus of control was first proposed by Rotter (1966). Locus of control is understood as a form of generalized expectancy useful in explaining personality differences in people's beliefs about the source of reinforcement. Locus of control is may be internal or external. Internal Locus of control may be defined as a belief that reinforcement is brought about by one's own behaviour. External Locus of control is a belief that reinforcement is under the control of other people, fate or luck. Rotter (1966) developed a self report inventory to assess the locus of control containing 23 forced choice alternative statements. Another very popular scale commonly used is the Norwicki- Strickland Scale developed by Norwicki and Strickland (1973) later refined by Strickland and Haley (1980) and Strickland (1989).

Studies have shown that Locus of Control is related to age (Heckhausen and Schulz 1995, Ryckman and Malikivisi 1975). However, no gender differences have been reported (Debrabander and Boone 1990)

Extensive research evidence is available linking locus of control to an array of observed behavioural differences.

Internally oriented people are more likely than externally oriented people to engage in daydreams about achievements than failure. They acquire and process more information, experience more personal choice, have higher self esteem and are more socially skilful (Abdullah 1989, Brannigan and Guay 1991, Lefcourt et al 1988)

People of internal locus of control are less likely to have emotional problems, cope better with stress and experience less anxiety (Benassi, Sweeney and Dufeur 1988). These kind of subjects were also more resistant to persuasion and coercion (Findley and Cooper 1989, Lefcourt 1982).

However there are not many studies reported linking locus of control to consumption except in the case of consumption of alcohol. In the consumer behaviour literature, attribution style is a more popular term which is more or less a similar construct. According to the concept of attribution style, people may be inner directed or other directed depending on where they place causality for the success or failure experienced.

Generally external locus subjects attribute theirs success to external factors like chance, luck or significant others. They are less sure of themselves and hence poor self-evaluation and it may be expected that such people will look at personal care products as solutions that will provide them with an improved appearance leading to a better acceptance from significant others. Since they are concerned about others and the role played by others in their lives, they may place an emphasis on conforming to the expectations of others and obtaining social acceptance.

# 3. Risk taking

Risk taking may be defined as the consistent behavioural disposition among individuals to prefer risky options in choice situations. People with high-risk taking are more confident of their judgments and consider less number of alternative options. They are also more tolerant of ambiguity.

Despite the extensive research on risk taking behaviour over the past several years, the construct itself is quite elusive and defies explicit definition. It is often understood as a process than an individual difference variable in research. Kogan and Wallach (1967) describe risk-taking behaviour on the basis of the kind of situations in which it is likely to be elicited. For these authors, behaviour reflective of risk taking disposition occurs in "situations where there is a desirable goal and a lack of certainty that it can be attained. The situation may take the form of requiring a choice

between more and less desirable goals, with the former having a lower probability of attainment than the latter. A further possible, not necessary, characteristic of such situation is the threat of negative consequences for failure so that the individual at the post decisional stage might find himself worse off than he was before he made the decision. ". The factors that are important in the case of risk taking are task and situational influence, personality characteristics and influences from group interaction.

The task and situational influences were studied from the pint of view of chance versus skill tasks. Slovic and Lichtenstein (1968) on the basis of several empirical studies on gambling games reported two fundamental aspects of risk taking. The choice depended on a) relative importance that subjects assign to the various probability and pay off components of a bet and b) limitations on information processing capacities which lead the decision maker to focus on particular components of a bet to the exclusion of other components. Cohen (1960) also compared chance versus skill situations and suggested that under equi-probable conditions, people generally prefer the skill games.

Another important characteristics relevant to risk-taking are the personal characteristics. Sex, age and social class differences in risk taking are reported in research (Kass 1964, Kogan and Wallach 1964, Scodel, Ratoosh and Minas 1959). Most of the research in risk taking as a behavioural disposition was related to achievement motive (Atkinson 1959).

There were numerous efforts to study risk taking as an individual difference variable. However, the view that risk taking is extremely situational and do not show generality across situations is the dominant viewpoint. Slovic (1962), Kogan and Wallach (1964) reported after extensive experimental studies that risk taking may be situational. However there may be some general patterns in risk taking. Bruner and Tajfel (1961) distinguished between narrow categorizers and broad categorizers and suggested that both handle risk in different manner. Kogan and Wallach (1964) reported that narrow categorizers might show conceptual conservatism.

Kogan and Wallach (1964) tried to relate risk-taking to personality variables. They posited that risk-taking might be related to impulsiveness, self-sufficiency and independence. People who report self-sufficiency and score high on independence were found to have higher risk taking than others. However, these results were moderated by the gender and not conclusive.

In consumer behaviour risk-taking is considered often as a process and perceived risk is related to various aspects like information search behaviour, brand and store loyalty etc. However, similar constructs are used as individual difference measures also like venturesomeness, sensation seeking, and conservatism. In the present study, risk taking is conceptualised as an individual difference construct.

It is reasonable to expect that people of high risk taking show less tendency to undervalue themselves in social comparisons as their perception of risk is lower especially in social interactions.

# 4. Social anxiety

Social anxiety is defined as the discomfort one feels in the presence of others. Social Anxiety is a feeling of fear, dread, unease, discomfort or apprehension that arises without a clear or appropriate real-life justification. Some authorities differentiate anxiety from true fear in that the latter is experienced in response to an actual threat or danger, such as those to one's physical safety.

Fenigstein, Scheier and Buss (1975) conceptualized the construct of self-consciousness as an individual difference variable related to self awareness.

They developed a scale to measure self-consciousness and the use of factor analysis revealed that the trait self-consciousness is a composite factor having three sub dimensions. The dimensions were termed private self-consciousness, public self-consciousness and social anxiety by the researchers. Further research evidence on the constructs is provided in the literature review concerning public self-consciousness Social anxiety may be considered as an outcome or as an inherent state. One may experience social

anxiety because of social comparisons. It may be posited that social anxiety is the offshoot of poor self-evaluation.

### 5. Consumer Self confidence

Bearden, Hardesty and Rose (2001) defined Consumer Self Confidence as the extent to which an individual feels capable and assured with respect to his or her market place decisions and behaviour. Consumer Self Confidence reflects subjective evaluations of one's ability to generate positive experiences as a consumer in the market place. It is multifaceted secondary disposition which is relatively stable self appraisal. Conceptually this construct is related to more basic constructs like self-esteem, perceived control and dominance.

Bearden, Hardesty and Rose (2001) developed a scale to measure Consumer Self Confidence which was proved to have high reliability and validity after extensive empirical testing.

Research revealed that Consumer Self Confidence is positively related to self-esteem and negatively related to CSII. People of high Consumer Self Confidence are less susceptible to external influence and are surer of themselves and their judgment. Therefore they more likely to take rational decisions and less concerned about the expectations of relevant others. It may be expected that Consumer Self Confidence determine the use of personal care products at least partially.

## 6. Appearance Anxiety

While beauty may be indeed in the eye of the beholder, research has provided rather consistent evidence that perceptions of physical attractiveness are subject to perceptual contrast effect. Thornton (1999) argued that one may feel less physically attractive when comparisons are made involving highly attractive others like the idealized media images. This may lead to an appearance anxiety, which may act as a motive to seek self-improvement. This is supported by earlier research done by Kenrick and Gutierres (1980) and Kenrick, Gutierres and Goldberg (1989).

The social comparison contrast effect for physical attractiveness influence not only the self perception of attractiveness, but also other aspects of the socials elf. In addition to diminished perceptions of attractiveness, other effects like decreased self esteem, increased public self-consciousness and heightened social anxiety are reported (Thornton and Moore 1993)

Appearance anxiety is defined as the apprehension or worry about whether one's physical appearance is adequate and about the way; one's appearance is evaluated by other people. There are several studies reported on the concept of appearance anxiety, which is an apprehension, or experienced unease of an individual about his or her appearance, body or physical attractiveness. It is conceptualised as an individual difference variable.

Davis et al. (1993) suggested that appearance anxiety is an apprehension about aspects of one's physical appearance and how others evaluate them. Most of the studies reported have focused on the female population. However Davis et al.(1993 argued that there is enough evidence to show that men are increasingly being concerned about matters of physical appearance and in the study conducted it was found that most of the variance in appearance anxiety in males is accounted for by the measure of upper body esteem.

# 7. Body Esteem

It is already established that the perceptions of an individual about his body forms an important part of his or her self-concept. Here the influence is bi-directional. Self-concept influence the body image and people of poor self-concept are likely to have negative evaluations of their physical attractiveness. Similarly, a poor evaluation of one's body is likely to lead to a poor self-concept. Our society places a premium of physical attractiveness and the media contains a number of images that represent an idealized body that is beyond the reach of the majority. Applications of the social comparison theory suggested that upward comparison with these idealized images may result in negative evaluation of one's own body and this might act as motive making an individual strive to attain the elusive ideal body. One possible outcome of this striving is eating disorders like anorexia. Extensive research studies focusing on the problems of eating disorders prevalent in western societies produced

empirical evidence supporting this theme. Killian (1994) and Prendergast (1998) has provided reviews of such studies.

Since advertisements frequently portray idealized images of body, they may influence one's body concept extensively. Here again there a lot of empirical support from research in eating disorders to establish a link between advisements, body images, and eating disorders.

Peterson (1987) reported that among his respondents who are women, advertisements created strong images about the desirability to have thin body inducing them to reduce body weight.

Martin and Kennedy (1993) suggested that the tendency among adolescents to compare themselves to the models in advertisements is greater for those with poorer self-perceptions of physical attractiveness.

Stephens et.al. (1994) noted that when exposed to advertisements with thin models, women's dissatisfaction with their body shape increases. This dissatisfaction may result in the women trying to achieve the same body shape as the model in the advertisement and this is often done through dieting and chronic dieting may lead to eating disorders.

Moses and Sunder (1991) experimentally demonstrated that low self-esteem is associated with a drive for thinness in afro-American women. Here chronic dieting is a strategy adopted as a coping response by the women

to overcome their feelings of insufficiency with regard to the body shape induced by the social comparison process. It is reasonable to assume that, consumption of personal care products may also be used by individuals to improve their attractiveness and this might be related to self-concept and body image. Self-Esteem is taken as a representative variable in the self-concept domain. A similar variable may be used to measure the body image.

Bell (1991) described the body image as a mental construction than an objective evaluation. Therefore, body image can deviate significantly from the person's objective physical characteristics. Body image may have four dimensions. Bell (1991) suggested that one might draw upon four reference models, which are the constituents of the body image. They are 1) socially represented ideal body, 2) internalised ideal; body, 3) present perceived body image and 4) objective body shape. Here the socially represented ideal boy leads to internalised ideal body w3hich in turn determine the present perceived body image.

There are numerous efforts at measuring the body concept as an individual difference variable. Folk, Pedersen and Cullari (1993) conceptualised and developed body satisfaction measure, which used five-point scale from very unhappy to very happy. Nine aspects of the body namely face, body, arms, hips, waist, legs, skin, height and weight were the items. Results on the use of this scale is reported by Guiney and Furlong (2000).

Franzoi and Shields (1984) conceptualised the construct 'body esteem' which is a thirty five item inventory measuring the feelings of subjects about a particular body part or asset. This scale is reported to have high test retest reliability and internal validity (Franzoi (1994). Cecil and Stanley (1991) reported reliability estimates ranging from 0.89 to 0.94 for the scale.

Since body esteem represent the perceived worth component of the body image, it is expected that low body esteem be related to consumption of personal care products.

# **Self-awareness**

Self-awareness is the awareness of one as a social object. This is a form of self-consciousness which may lead to an individual trying to manage his image as it appear to others. Self-awareness is understood to have two dimensions namely subjective self-awareness and objective self-awareness. According to Wickland (1975), when a person's attention is focused on the environment, he is in a state of subjective self-awareness. However, when his attention is focused on himself, then he is in a state of objective self-awareness. Fenigstein, Scheier and Buss (1975) conceptualised the construct of self-consciousness as an individual difference variable related to self-awareness.

#### 1. Public Self-consciousness

Public self consciousness is the awareness of self as a social object Fenigstein, Scheier and Buss (1975) conceptualised the construct of

self-consciousness as an individual difference variable based on their observation that there are some people who constantly think about themselves, scrutinize their behaviour and mull over their thoughts to the point of obsession while some others show an absence of self-consciousness leading to an absolute lack of understanding of their own motives or how they appear to others. This consistent tendency of persons to direct attention inward or outward is termed the trait of self-consciousness.

They developed a scale to measure self-consciousness and the use of factor analysis revealed that the trait self-consciousness is a composite factor having three sub dimensions. The dimensions were termed private self-consciousness, public self consciousness and social anxiety by the researchers, High degree of reliability was reported for the sub scales (Chronbach alpha of 0.84, 0.79 and 0.73 respectively for private self-consciousness, public self-consciousness and social anxiety) Validity was established with the help of factor analysis.

Based on the factor loadings of individual items, the factors were interpreted and defined as follows.

Fenigstein, Scheier and Buss (1975) posited that there are two separate aspects of self consciousness which they called private self consciousness and public self consciousness. The private dimension is similar to the Jungian concept of introversion with focus on the thoughts and reflections that deal solely with the self. Public self consciousness is the

awareness of self as a social object which comes as a result of an awareness of another's perspective. Here the emphasis is on the reactions of others to the self. The public self consciousness factor was defined as a general awareness of the self as a social object that has an effect on others. While public self consciousness is a process of self focused attention, social anxiety is a reaction to this process. Here social anxiety is a discomfort one feels in the presence of others.

The authors found the three dimensions to have a small correlations with to each other. No difference across gender was reported. The authors were more particularly interested in the clinical applications of the concept.

Subsequent to the development of the scale, considerable research attention has been focused on validating the instrument further by exploring the factor structure. Carver and Scheier (1978) demonstrated the convergent and discriminant validity of the subscales. Martin and Debus (1999) also explored the factor structure and modified the scale by changing some items to yield results that are more consistent. A lot of experimental studies were also undertaken on the subscales by manipulating the private and public awareness and relating the changes to specific behavioural variables. In many of these studies, self-consciousness was experimentally manipulated by using mirrors in front of the subjects.

Brockner (1979), Gibbons (1983), Scheier and Carver (1973), Scheier, Carver and Gibbons (1979) reported results of such studies.

Since Public Self Consciousness is an awareness of oneself as a social object, this trait may be related to one's efforts at managing the public image. Current research in this domain suggest that high public self consciousness subjects should be more sensitive to protecting and enhancing their feelings of personal worth and competency and to maintaining and restoring a positive self image.

Cheek and Briggs (1982) proved that public self-consciousness was linked to impression management or overt displays. Empirical evidence indicate that the public self-consciousness and the concern for impression management are related constructs, both involving a desire to protect one's public image (Schlenker 1980). Therefore, public self-consciousness can be posited to be related to self-alteration or self improvement. Since personal care products are used heavily in order to effect an improvement in one's social image, it is reasonable to expect that people of high public self-consciousness are likely to be heavy users of such products.

Similarly social anxiety may also be related to the consumption of such products. A person of high social anxiety is likely to be worried about his appearance and is therefore prone to use personal care products to overcome his or her feelings of inadequacy.

Burnkrant and Page (1982) citing works of Fenigstein (1979) and Scheier (1980) suggested that it is very likely for some people to be more

sensitive than others to the impressions called for or likely to be rewarded in social situations. These people are more inclined than others to present an image of themselves that would lead to the desirable impression in these situations. Public self-consciousness was posited to be a variable that would help explain the differences in concern for impression. They concluded "It is reasonable to expect, but has never been shown, that people who score highly on this variable (public self-consciousness) would also be more inclined than low scorers to use consumer goods to create favourable impressions."

Generally self-awareness theory is concerned with the self regulation process that control the intensity and direction of ongoing behaviour. Wegener and Vallacher (1980) posited that self attention may evoke a matching to standards process, whereby a person conforms to whatever he or she takes as a standard of appropriate behaviour.

Turner et al (1978) had also reached the same conclusion that people of high public self-consciousness are likely to be particularly concerned with their social appearance and impressions they make on others.

Fenigstein (1979) found that women who score high on public self-consciousness were more sensitive to peer group rejection.

Scheier (1980) hypothesized that individuals high in public selfconsciousness should try harder to create a favourable public image and should therefore by more likely to change their beliefs in order to make them more consistent with the beliefs of others around them. These assumptions were tested by an experimental method where subjects were asked to write essays reflecting their opinions on an issue under instructions that these essays will be discussed with the others. The results reported support the assumptions made. It was found that people who scored high on public self-consciousness expressed opinions that were more moderate than they actually held under the condition that these essays would be revealed to others. The low scorers were found not to differ in their opinions.

Turner, Guililand and Klein (1981) posited that publicly self conscious individuals have more well defined physical attractiveness self schema than their less conscious counterparts and they therefore respond more quickly to evaluative judgments of their appearance, This make them more attentive to their physical image. Various research studies reported that high public self-consciousness individuals engage in behaviours like extensive make up use to enhance their physical appearance (Cash and Cash 1982; Lypson, Przybyla and Byrne 1983; Miller and Cox 1982)

It is also reported that public self-consciousness particularly characterizes of appearance-schematic women who maintain strong beliefs regarding the importance of physical appearance n one's life (Cash and Labarge 1996) and these women have displayed preferential attention towards processing appearance related information (Labarge, Cash and Brown 1998)

Based on the above evidence, it was decided to use the variables public self-consciousness and social anxiety as predictor variables to explain the differences in the consumption of personal care products.

#### **Persuasibility**

Persuasibility or susceptibility to persuasion is conceptualised as an individual difference variable. It is observed that some people are easily persuaded than others and this tendency is a stable behavioural disposition across situations. These were numerous efforts to measure persuasibility, but it is felt that a general construct of persuasibility do not have a great deal of explanatory power and therefore specific measures were developed in marketing for use in research. Consumer susceptibility to interpersonal influence (CSII) and Susceptibility to television advertising are two such measures.

#### 1. Consumer Susceptibility to Interpersonal Influence

An important determinant of an individual's behaviour is the influence of relevant others. Advertisers understand this and resort to portrayal of products shown to be consumed publicly. The same reasoning is also used in the case of endorsements by celebrities and other spokespersons. In fact no model of consumer behaviour is complete with out including the effect of interpersonal influence. Interpersonal Influence plays an important

role on the development of norms, values, attitudes and aspirations which finally gets reflected in purchase behaviour (Stafford 1966).

Early attempts were made to study the susceptibility to influence by several researchers. McGuire (1968) suggested the construct of 'influencibility' as a general behavioura! disposition. Research done Cox and Bauer (1964) and Janis (1954) also addressed this construct and suggested that the influencibility may be measured as an individual difference variable. These studies proved that some people are consistently more amenable to social influence than others. Janis (1954) concluded that people of low self-esteem tend to be more readily influenced than others. Park and Lessig (1977) borrowing heavily from the previous reported research, developed a scale to measure susceptibility to interpersonal influence using 14 projective statements. These items were used in several studies by Bearden and Etzel (1982) and Brinberg and Plimpton (1986). However since the items were projective in nature, it was difficult to establish the psychometric properties of the instrument using statistical means.

In order to overcome these limitations, Bearden. Netemeyer and Teel (1989) developed and tested an instrument to measure Consumer Susceptibility to Interpersonal Influence called Suscep or CSII. Extensive empirical testing demonstrated the reliability and Validity of the instrument. Factor Analytic Studies revealed the scale is in fact composed of two dimensions termed Normative and Informational. Here the Normative

component (Consumer Susceptibility to Normative Influence) is defined as the tendency to conform to the expectations of others. The Informational Component (Consumer Susceptibility to Informational Influence) is defined as the tendency to accept information from others as evidence of reality.

Including both these components, Consumer Susceptibility to Interpersonal Influence (CSII) was defined as the need to identify or enhance one's image with significant others through the acquisition and use of products and brands, willingness to conform to the expectations of others regarding purchase decisions and or the tendency to learn about products and services by observing others and or seeking information from others.

CSII was found to be positively correlated to the construct Attention to Social Comparison Information (ATSCI) and negatively correlated to Self-Esteem.

Since personal care products are used to improve one's appearance and social acceptance thereby, it is reasonable to conclude that the heavy users of such products be more concerned about what others think as well as more likely to seek information from others regarding what is more appropriate. It may be therefore expected that people of high CSII, being more susceptible to influence are more likely to be heavy users of personal care products.

# 2. Susceptibility to Television Advertising

Personal Care products are extensively advertised especially in the audiovisual media. This advertising plays a major role in influencing the use of such products. Since personal care products generally are low involvement, consumers may not be expected to use a rational problem solving approach. The peripheral route to persuasion according to the elaboration likelihood model is likely to work more in this regard. Generally, consumers who are more susceptible to persuasion from the audiovisual media may be posited to be heavy users of personal care products.

Barr and Kellaris (2000) proposed an individual difference measure called susceptibility to Advertising and attempted to develop an inventory to measure the construct.

Susceptibility to Advertising was defined as the extent to which individuals attend to and value commercial messages as sources of information for guiding their consumptive behaviours. The researchers developed the scale and tested it extensively for both reliability and validity. The measure of reliability obtained is reported which is Cronbach alpha of 0.8271. The scale was also validated using confirmatory factor analysis by LISREL.

STA showed significant positive correlations between similar constructs namely Attention to Social Comparison Information (ATSCI), both normative and informational dimensions of Consumer Susceptibility to Interpersonal Influence (CSII)

Susceptibility to Advertising is also reported to be positively correlated with the three dimensions of materialism scale namely centrality, happiness and success.

The researchers drawing on the work done on the Elaboration Likelihood Model (ELM) proposed by Petty and Cacioppo (1981), suggested that people with high Susceptibility to Advertising are less critical in their evaluations of advertisements, and use more of heuristic processing methods. This is also consistent with the tenets of the Heuristic –Systematic Model (HSM) framework proposed by Chaiken (1980). Experimental studies offered some evidence in support of this theme.

Barr and Kellaris (1997 and 2000) focused on the medium of television since the peripheral route to persuasion is mostly the approach suited for such a low involvement medium and specifically developed the construct in the domain of television advertising. STA in its current form is therefore Susceptibility to Television Advertising.

Personal Care products being low involvement products and since they are advertised heavily in television media, it is reasonable to assume that consumers who are more susceptible to television advertising are more likely to form favorable attitudes towards the product or brand advertised. This may result in differences in purchase and consumption.

# CHAPTER 3 SCOPE AND METHODOLOGY

# 3.1 Introduction and statement of the problem

The consumption of personal care products is on the increase especially among the youth. Many of these products are low involvement and are primarily used to enhance and maintain the appearance of an individual. Promise of physical attractiveness leading to better social acceptance is a recurring theme used in many advertisements to promote personal care products. People buy and use these products motivated by their desire to enhance their physical attractiveness. There are individual differences in consumption and this study attempted to relate these differences in consumption to personality variables. What make some people heavy users of personal care products? How can the differences in consumption of personal care products be explained with the help of personality factors if it can be done? These are major problems addressed in the study.

#### 3.2 Objectives

The major objective of the research was to study the interaction between personality factors that explain differences in consumption of personal care products. Another objective was to explain the linkages between personality variables that contribute to differences in consumption and offer a theoretical model and explanation for the phenomenon. A third

objective was to find out whether personality variables can be used to predict consumption. The researcher attempted to draw from existing research in personality to provide a theoretical explanation for the phenomenon of individual differences observed in the consumption.

### 3.3 Theoretical background

Several different streams of research reported by various authors suggested different approaches to explain the consumption using psychological factors. One such stream is on the interaction of the 'self' with the environment that determines consumption. The self concept is considered to be an important factor that influence the purchase behaviour The general consensus is that there is a congruence between the perceived self image and the consumption. Different aspects of the perceived self are reported to be related to consumption of certain brands, products and services.

An important stream of thought from the self-concept domain is the social comparison theory proposed by Festinger (1954). Individuals develop their sense of self and form self-perceptions based on comparisons with relevant others since there is no objective standard. Here the relevant others need not be friends and family, but include the idealized media images to which one is exposed in daily life. An individual is exposed to a large number of idealized media images especially that perpetuated by the advertising and many of these images represent an unattainable standard to which comparisons are made. These comparisons, which are essentially upward, result in negative perceptions and evaluations of the self. It is suggested that this poor evaluations may act, as a motive to improve and enhance one's self to conform better to the advertised ideal. A specific instance of this process is used to explain the prevalence of eating disorders quite common in western societies. Comparisons with idealized body projected in the media result in poor evaluations of one's own body and this may act as a motive to improve one's body to conform to the ideal. Commonly this leads to an obsession with dieting which may manifest itself as anorexia nervosa or bulimia.

It is reasonable to expect that there may be individual differences in the susceptibility to the social comparison process. Generally, the self-concept and specifically the body-concept may determine differences in consumption especially for a product that has the benefit of improving the physical attractiveness of an individual. The number of studies on self-concept reported show a diversity in terms of the variables used to conceptualise and measure the self. Conceptually many of these variables may be understood to represent two aspects of the self namely self-evaluation and self-awareness.

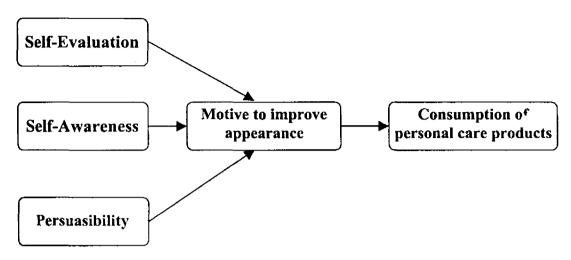
Self-evaluation is about an individual's perceived worth which is both an antecedent as well as an outcome of the social comparison process. Upward comparisons with idealized media images may result in a poor selfevaluation. Similarly, a poor self-evaluation may lead to an individual internally attributing the cause in an upward comparison. It is a vicious cycle.

Self-awareness is the awareness of one as a social object. This is a form of self-consciousness which may lead to an individual trying to manage his image as it appear to others.

Another relevant area of research surveyed was about the differences in persuasibility of individuals. There are individual differences in susceptibility to persuasion from various sources including advertising. Many products are purchased and consumed by people because of the effect of persuasion whether from relevant others or advertising. The marketing process works on persuasion. There is a lot of evidence relating self-concept variables to persuasibility. It may be expected that to some extent the differences in consumption personal care products may be explained by differences in persuasibility.

The three fundamental factors therefore considered in the study were self-evaluation, self-awareness and persuasibility. The theoretical model linking these factors to the consumption is provided below.

Diagram 3. 01. Theoretical model of the study



In addition to the three factors, gender was also considered important since it is expected that gender wise differences are significant in the consumption of personal care products.

#### 3.4 Scope of the study

The term personal care products refer to a large number of products used for different purposes, known by different names. One common classification scheme followed is grouping the products as personal hygiene products, personal grooming products and cosmetics. Personal hygiene products include toilet soap and tooth paste and their use is almost universal. The cosmetics include products lipstick and mascara, which are used for make up and are predominantly used by women and on special occasions. It was decided to confine the study to personal grooming products only. This is because use personal hygiene products are almost universal and use of cosmetics is mostly confined to women and again often occasional

dictated by cultural patterns. The individual differences are likely to be more conspicuous in the case of personal grooming products.

When exploring the relationships between personality and consumption, the effect of a large number of other factors like age, marital status, family size and culture in addition to income and gender need to be considered, which may confound the relationships. In order to get a clear picture of the relationship between personality factors and consumption of personal care products, it is necessary to control for the effect of other factors. In the study, this is done by restricting the study to the state of Kerala and to the graduate and postgraduate students of colleges in the state. Gender and income were included in the study and the sample was selected randomly to get a representative sample.

# 3.5. Significance of the study

The study is significant from both an application perspective of marketing management as well as from an academic angle.

The market for personal care products is a highly fragmented one, with intense competition for specific niche segments. It is well known in marketing literature that the bulk of the volume of sale is accounted for by the minority who are the heavy users. This study will help the marketers to identify the personality profile of such a group and understand how the interaction of personality factors at least partially explains differences in

consumption. This knowledge might be useful for better segmentation using psychographic variables as well as for designing specific advertisement campaigns to target the vulnerable groups of customers.

From a theoretical perspective, the research may contribute to understanding how specific personality variables and their interaction lead to differences in consumption. The knowledge corresponding to self theory, social comparison theory, persuasibility, evidence from psychology of eating disorders: these all may be integrated into a common frame work for explaining consumption of products having a social function.

The personality correlates of the marginal groups who show vulnerability to consumption will also prove useful from a public policy perspective.

#### 3.6 Variables in the study and measurement

The variables in the study and their definitions are listed below. In certain cases, available published inventories were used to operationally measure the constructs after verifying the reliability by pre-testing, the relevant statistics is provided later. In certain cases, the researcher developed and tested scales for other variables. The scale development procedure followed, and the relevant statistics in the case of those scales developed by the researcher is provided in the subsequent section.

# Dependent variable

#### 1. Use of personal care products

The dependent variable is the usage of personal care products. A definition of the personal care product is given below. A personal care product may be defined as any of several preparations that are applied to the human body for beautifying, preserving, or altering the appearance or for cleansing, colouring, conditioning, or protecting the skin, hair, nails, lips, eyes, or teeth.

Operationally, the usage of personal care product was measured on a four-point scale in the case of seven commonly used products identified in the pilot study. The products were talcum powder, shampoo, fairness creams, moisturizing cream, moisturizing lotions, deodorants and perfumes. The total score obtained was taken as the measure for the variable 'use of personal care products'.

#### **Independent variables**

#### 1. Self-Esteem

Rosenberg (1965) described Self-esteem as a favourable or unfavourable attitude toward the self. It refers to the degree to which an individual values himself or herself internally on a personal level or externally as a member of a group. Though several scales are available for

this construct, several criticisms are also leveled against the validity of many.

The researcher developed a scale using a large number of items from many different scales. In its final form, the scale contained 10 items.

#### 2. Public Self-consciousness

Public Self-consciousness measures the awareness of self as a social object.

Fenigstein, Scheier and Buss (1975) conceptualised the construct of self-consciousness as an individual difference variable related to self awareness. They observed that there are some people who constantly think about themselves, scrutinize their behaviour and mull over their thoughts to the point of obsession while some others show an absence of self-consciousness leading to an absolute lack of understanding of their own motives or how they appear to others. This consistent tendency of persons to direct attention inward or outward is termed the trait of self-consciousness.

Public self-consciousness was measured using the scale originally developed by Fenigstein, Sheier and Buss(1975) modified later by Martin and Debus (1999). It contains six items.

#### 3. Social Anxiety

Social anxiety is defined as the discomfort one feels in the presence of others.

Social Anxiety is a feeling of fear, dread, unease, discomfort or apprehension that arises without a clear or appropriate real-life justification. Some authorities differentiate anxiety from true fear in that the latter is experienced in response to an actual threat or danger, such as those to one's physical safety.

For Social anxiety, the instrument developed by Fenigstein, Sheier and Buss(1975) modified later by Martin and Debus (1999) containing six items was used.

# 4. Consumer Susceptibility to interpersonal Influence (CSII)

Consumer Susceptibility to Interpersonal Influence (CSII) is defined as the need to identify or enhance one's image with significant others through the acquisition and use of products and brands, willingness to conform to the expectations of others regarding purchase decisions and or the tendency to learn about products and services by observing others and or seeking information from others.

Factor Analytic Studies revealed the scale is in fact composed of two dimensions termed Normative and Informational. Here the Normative component (Consumer Susceptibility to Normative Influence) is defined as the tendency to conform to the expectations of others. The Informational Component (Consumer Susceptibility to Informational Influence) is defined as the tendency to accept information from others as evidence of reality.

79

Consumer Susceptibility to interpersonal influence (CSII) was measured by the instrument developed by Bearden, Netemeyer and Teel (1989). CSII scale has twelve items of which eight measures the normative component and four the informational component.

#### 5. Consumer Self Confidence (CS)

Bearden, Hardesty and Rose (2001) defined Consumer Self Confidence as the extent to which an individual feels capable and assured with respect to his or her market place decisions and behaviour.

Consumer Self Confidence reflects subjective evaluations of one's ability to generate positive experiences as a consumer in the market place. It is multifaceted secondary disposition which is relatively stable self appraisal. Conceptually this construct is related to more basic constructs like Self-Esteem, perceived control and dominance.

Consumer Self Confidence (CS) was measured using selected items having the maximum factor loadings from the scale developed by Bearden, Hardesty and Rose (2001). In its final form, which was used for study, the scale contained twelve items.

# 6. Susceptibility to Television Advertising (STA)

Susceptibility to Advertising is defined as the extent to which individuals attend to and value commercial messages as sources of

information for guiding their consumptive behaviours. Susceptibility to Television Advertising (STA) is the extent to which individuals attend to and value television commercials as sources of information for guiding their consumptive behaviours.

Susceptibility to Television Advertising (STA) was operationally measured by the scale developed by Barr and Kellaris (2000) which contained six items.

#### 7. Locus of control

The concept of locus of control was first proposed by Rotter (1966). Locus of control is understood as a form of generalized expectancy useful in explaining personality differences in people's beliefs about the source of reinforcement. Locus of control is may be internal or external. Internal Locus of control may be defined as a belief that reinforcement is brought about by one's own behaviour. External Locus of control is a belief that reinforcement is under the control of other people, fate or luck.

Locus of control was measured by the scale developed and tested by the researcher. It contained fourteen items.

#### 8. Risk taking

Risk taking may be defined as the consistent behavioural disposition among individuals to prefer risky options in choice situations.

People with high-risk taking are more confident of their judgments and consider less number of alternative options. They are also tolerant of ambiguity.

Risk taking was measured by the scale developed by the researcher, which contained ten items.

#### 9. Body-Esteem

Body-esteem may be defined as the self-perceptions of the attractiveness of the body. It is the worth dimension of one's own body. It represents the favourable or unfavourable attitudes an individual has about his or her body.

Franzoi and Shields (1984) conceptualised the construct 'body esteem' which is an inventory measuring the feelings of subjects about a particular body part or asset. In the present study, researcher used a modified version of this inventory using items that tap the aspects of the body that are important in determining the external appearance enhancement product use. The scale had 19 items.

#### 10. Appearance anxiety

Appearance anxiety is defined as the apprehension or worry about whether one's physical appearance is adequate and about the way, one's appearance is evaluated by other people.

There are several studies reported on the concept of appearance anxiety, which is an apprehension, or experienced unease of an individual about his or her appearance, body or physical attractiveness. It is conceptualised as an individual difference variable. In the study, appearance anxiety was measured by an inventory developed by the researcher. The scale contained fourteen items scored on a four-point scale.

# Other Independent Variables

Two additional variables were conceptualised by the researcher and included in the study. They were appearance motive and social embarrassment. Also in order to have a check against the tendency of the respondents to give socially desirable responses, an L scale was included in the questionnaire.

#### 1. Appearance motive

Appearance motive is the motivation of an individual to improve his appearance.

This variable was conceptualised by the researcher to represent the conscious desire of an individual to expend effort to improve the appearance. The variable was operationally measured as the self reported conscious desire to improve the appearance. In its final form, the scale contained three items.

#### 2. Social embarrassment

The researcher conceptualised and developed a variable 'Social embarrassment', which represent the perceptions of respondents on the social embarrassment potential some common bodily problems, aspects or imperfections perceived to cause social embarrassment by reducing the physical attractiveness of an individual.

Social embarrassment represents the 'embarrassibility' of some common problems like dandruff or some aspects like dark skin. The individuals may have different perceptions about the extent to which these are embarrassing socially. The perceptions reflect the judgment of the society on these bodily aspects internalised by the individual or indicate the concept of a socially desirable body.

The variable was measured by a scale developed by the researcher, which contained eleven items corresponding to bodily aspects measured on a response scale from not at all embarrassing to very embarrassing.

#### 3. L Scale

When responses are obtained on personality inventories, there is a tendency among respondents to provide socially desirable answers rather than their true responses. In order to have a check on this potential error, the researcher used an L scale, which measure the social desirability bias of the respondents. It contained five items scored on a four-point scale. The score on the L scale was used to screen out those respondents who are more likely to provide a desirable response than the true response.

# **Demographic Variables**

The researcher also collected information regarding the gender, age, degree of urbanization (urban or rural), and the income of the respondents.

#### 3.7. Hypotheses

Researcher attempted to bring together the perspectives of the self-theory, persuasibility theory and social comparison theory to find an explanation to the observed differences in consumption of personal care products. A large number of studies relating to the problem of eating disorders demonstrated that a poor self-concept would lead to a person developing anxieties because of social comparison process. A poor self-evaluation, higher persuasibility and heightened self-awareness may determine a high consumption of personal care products. Gender and income may also have a role here. On the relationships between the variables, hypotheses were formulated. Gender and income were expected to be related to consumption. There is also evidence from theory that gender differences

may be expected in the case of some personality variables. Therefore, the following apriori expectations were there.

- Significant gender differences are expected in consumption of personal care products as well as on independent variables like self-esteem, risk taking, CSII and body esteem.
- 2) Use of personal care products will show significant differences across various income groups.

Thirteen hypotheses were formulated on the anticipated relationships among the variables. They are listed below.

- Persons with internal locus of control will have significantly higher selfesteem than those with external locus.
- 2. Persons with high self-esteem show significantly more risk taking than those with low self-esteem.
- 3. People with low self-esteem show significantly higher social anxiety than those with high self esteem.
- 4. People with low self-esteem show significantly higher appearance anxiety than those with high self esteem.
- 5. People with low self-esteem show significantly lower body esteem than those with high self-esteem.
- 6. Consumer self confidence is significantly lower in persons of low selfesteem compared to those with high self esteem.

- 7. People with low self-esteem consider physical deficiencies more embarrassing socially than those with high self-esteem.
- 8. People of high public self-consciousness will have significantly higher appearance motive compared to those who score lower.
- 9. a. The scores on the normative dimension of CSII is significantly higher in the case of persons with low self-esteem compared to those with high self-esteem for both males and females.
  - b. There is no difference in the scores of informational dimension of Susceptibility to interpersonal influence between people with high self-esteem and those with low self esteem for both males and females.
- 10. Use of personal care products is significantly more in the case of people with low self esteem compared to those with high self esteem.
- 11. The use of personal care products is significantly higher in people of high public self-consciousness compared to those who score low in this dimension.
- 12. a. Appearance motive is significantly higher for those with low self esteem and high public self-consciousness compared to all others.
  - b. Use of personal care products is significantly more for those with low self-esteem and high public self-consciousness compared to all others.
- 13. Persons who score high in susceptibility to television advertising use more of personal care products compared to those who lower.

#### 3.8 Pilot Study and Development of Tools

The researcher developed scales for measuring self-esteem, locus of control, risk taking, appearance anxiety, appearance motive and social embarrassment. For this an item pool was generated for each variable. Data was collected from a convenience sample of 300 respondents and the items were tested for the discrimination. A simple dichotomous scale having yes and no or agree and disagree options were used. In the case of certain items, it was observed that an overwhelming majority even more than 95% of the respondents had given the same answer. Such items were deemed not to discriminate between the respondents on the construct measured. Only those items where a 75% –25 % or better discrimination had been obtained was retained for the subsequent scale development procedure. Using the selected items from this step, item analysis was conducted for each variable to arrive at an inventory with the maximum reliability.

Further data was collected on all the variables from a convenience sample of 150 respondents using a five point Likert scale and the reliability was computed. The researcher also included items from standard inventories in the case of self-esteem and locus of control to check the validity of the developed scale. Factor analysis was performed for the items constituting each variable separately and factor structure was explored as an evidence of validity.

A sample of 35 respondents was used to establish the test re-test reliability. Wherever available, standard inventory measuring the same construct was correlated to the developed tool as further evidence of validity.

The use of personal care products was measured using a 4 point scale ranging from regular user to non user and responses were obtained for 7 products, talcum powder, shampoo, fairness cream, moisturizing cream, moisturizing lotion, deodorants and perfumes.

For Public Self consciousness and Social anxiety, the instrument developed by Fenigstein, Sheier and Buss(1975) modified later by Martin and Debus (1999) was used. Consumer Susceptibility to interpersonal influence (CSII) was measured by the instrument developed by Bearden, Netemeyer and Teel (1989). Consumer Self Confidence-Bearden, Hardesty and Rose (2001), Body Esteem-Franzoi and Shields (1984), Susceptibility to Advertising -Barr and Kellaris (2000) were used after adaptation and pretesting. The variable social embarrassment was measured by a scale developed by the researcher, which contained eleven items corresponding to bodily aspects measured on a response scale from not at all embarrassing to very embarrassing.

The reliability figures obtained are provided in the table given below.

Table 3.01 Reliability of scales

| Variables                                | No. of | Reliability-       | Reliability-<br>Main study |                    |  |
|--|--------|--------------------|----------------------------|--------------------|--|
| v ariables                               | Items  | Chronbach<br>alpha | Test<br>Retest             | Chronbach<br>alpha |  |
| Self Esteem                              | 10     | 0.7979             | 0.8596                     | 0.8325             |  |
| Risk taking                              | 10     | 0.7625             | 0.7925                     | 0.7625             |  |
| Locus of Control                         | 14     | 0.8124             | 0.8232                     | 0.8021             |  |
| Appearance Anxiety                       | 14     | 0.7985             | 0.8362                     | 0.7869             |  |
| Public Self-consciousness                | 6      | 0.8758             | 0.8996                     | 0.8786             |  |
| Appearance motive                        | 3      | 0.8236             | 0.8524                     | 0.8324             |  |
| Social anxiety                           | 5      | 0.8458             | 0.8657                     | 0.8254             |  |
| CSII                                     | 12     | 0.8992             | 0.8998                     | 0.8234             |  |
| Customer Self Confidence                 | 12     | 0.8935             | 0.9101                     | 0.8125             |  |
| Susceptibility to Television Advertising | 6      | 0.7548             | 0.7892                     | 0.7326             |  |
| Use of personal care Products            | 7      |                    | 0.8721                     |                    |  |
| Body Esteem                              | 19     | 0.8565             | 0.8674                     | 0.8362             |  |
| Social embarrassment                     | 11     | 0.7254             | 0.8365                     | 0.8124             |  |

The reliability estimates are provided for the pilot study and the main study where Chronbach Alpha, which is a measure of inter-item correlation, is used. The scales were also tested for the test-retest reliability and the correlation coefficients are provided in the table. It may be seen that all the scales show a high and acceptable reliability

The relevant scale parameters from the main study are provided in the table below. The number of items in each scale, arithmetic mean, standard deviation, minimum value, maximum value and the percentile scores (25, 50 and 75) are provided in the table.

Table 3.02 Scale parameters - Variables

| Variables                                | No. of<br>Items | Mean    | Std.<br>Deviation |  |
|--|-----------------|---------|-------------------|--|
| Self Esteem                              | 10              | 27.8359 | 4.8231            |  |
| Risk taking                              | 10              | 29.5521 | 5.4204            |  |
| Locus of Control                         | 14              | 41.4922 | 5.1607            |  |
| Appearance Anxiety                       | 14              | 33.9379 | 5.4594            |  |
| Public Self-consciousness                | 6               | 17.9202 | 3.2718            |  |
| Appearance motive                        | 3               | 8.2506  | 2.2943            |  |
| Social anxiety                           | 5               | 12.6452 | 3.2398            |  |
| CSII                                     | 12              | 27.643  | 6.8146            |  |
| Customer Self Confidence                 | 12              | 34.2284 | 5.4901            |  |
| Susceptibility to Television Advertising | 6               | 14.9845 | 3.2424            |  |
| Use of personal care Products-           | 7               | 15.6585 | 4.6699            |  |
| Body Esteem                              | 19              | 59.5299 | 8.6258            |  |
| Social embarrassment                     | 11              | 27.4678 | 6.639             |  |

#### 3.9 Data Collection

# **Population**

The population of the study was the students of graduate and post-graduate programmes of the colleges of Kerala.

# Sample size and sampling plan.

Researcher targeted a sample size of 450. The final questionnaire was administered to 510 respondents who are students of graduate and postgraduate courses in different colleges in Kerala. Twenty colleges were identified for the study from five districts in Kerala. A cluster sampling

procedure was used where from each college, a batch was selected at random and all the students in the cluster were administered the questionnaire. The administration normally took 30-45 minutes.

# 3.10 Statistical Methods and Analysis

The data was edited coded and analysed using SPSS 10.0 for windows and Lisrel 8.54 student version. After screening and scrutiny, those questionnaires that were incomplete in the responses to the inventories were eliminated. Also those questionnaires where the score on L Scale above 75<sup>th</sup> percentile was eliminated. Finally 451 questionnaires were included in the analysis. Factor analysis with rotation was used to explore the underlying patterns in the relationships between variables. The variables were divided into high and low on median split. Variables self esteem and use of personal care products were divided into 4 groups based on quartiles. Student's t Test, Analysis of Variance and Chi-square Test were used to test the hypothesis. The tests of significance were conducted and interpreted according to the methodology suggested by Henkel(1976) In addition, correlations were worked out using the Pearson method. The researcher also used the method of logistic regression to predict the use of personal care products from the orthogonal factors obtained in the factor analysis.

# 3.11 Limitations of the study

- 1. The study was restricted to the students of graduate and postgraduate programmes of the colleges in Kerala state. Therefore, the results need not be generalizable to all the age groups.
- 2. Majority of the respondents were from upper income groups having a monthly family income of ten thousand rupees or above. Therefore, the patterns observed in consumption need not be applicable to people of lower income groups.
- 3. The study was on personal care products as a category and the researcher did not undertake a microanalysis on specific products or variants.
- 4. There may be personality variables or situational factors that were not included in the study that may have a significant influence on consumption.

# CHAPTER 4 DATA PRESENTATION, ANALYSIS AND INTERPRETATIONS

The analyses of the data with the results of tests conducted are provided in this chapter. Various hypotheses were tested and the interpretations are provided in tabular format. However, the detailed discussion linking the theoretical model proposed to the dependent variable by drawing on the previous research reported is done in the next chapter titled discussion of findings.

# 4.1 Sample Profile and demographics

Reponses were obtained from 510 respondents. Some questionnaires were incomplete in the answers to the items in personality scales and were not included in the analysis. In addition, the questionnaire where the score on the L scale was above the 75<sup>th</sup> percentile score was also eliminated. After screening and scrutiny, 451 questionnaires were analysed. The break up of the sample on demographic variables is provided below.

Table 4.01 Sample break up by gender

| Gender | Frequency | Percent |
|--------|-----------|---------|
| Male   | 253       | 56.1    |
| Female | 198       | 43.9    |
| Total  | 451       | 100.0   |

Out of 451 respondents, 253 were male and 198 females contributing to 56.1% and 43.9 % of the total respectively. Though the numbers are not equal, in a large sample adequate representation is there from both the gender to facilitate comparison.

The numbers of respondents from urban and rural areas are provided in the table given below.

Table 4.02 Urban-Rural composition of the sample

| Area of residence | Frequency | Percent |
|-------------------|-----------|---------|
| Urban             | 302       | 67.0    |
| Rural             | 148       | 32.8    |
| No response       | 1         | 0.2     |
| Total             | 451       | 100.0   |

Majority of the respondents are from the urban areas though rural consumers are also adequately represented with 148 respondents.

Income is an important variable that is always considered in any consumer behaviour study. Respondents were asked to indicate their monthly family income by selecting range provided from less than Rs.5000 to above Rs.30000. The income profile of the respondents is provided below.

Table 4.03 Family Income classifications

| Monthly Income                 | Frequency | Percent |  |
|--------------------------------|-----------|---------|--|
| Less than Rs.5000              | 85        | 18.8    |  |
| Between Rs.5000 and Rs. 10000  | 99        | 22      |  |
| Between Rs.10000 and Rs. 15000 | 92        | 20.4    |  |
| Between Rs.15000 and Rs. 20000 | 73        | 16.2    |  |
| Between Rs. 20000 and Rs.30000 | 57        | 12.6    |  |
| Above Rs.30000                 | 11        | 2.4     |  |
| No response                    | 34        | 7.5     |  |
| Total                          | 451       | 100     |  |

The table above provides the income wise breakup of the respondents. It is seen that almost 60% of the respondents do have a monthly family income less than Rs.15000. Though there is a sizeable group of the high-income, majority is the middle-income group. Definitely, the income of the respondents in the sample is above that of the mean income of general state population, but this may be because the study was confined to students of graduation and post graduation and there were a number of professional students in the sample. Another observation is that there are thirty four no responses contributing 7.5 % of the sample. People are reticent in providing information about their true income and though this is less among the students who constituted the sample, the trend is still visible.

A number of variables were included in the study based on the literature review. These variables were from the self-concept domain and the persuasibility domain. Use of personal care product is the dependent variable

and the independent variables were the personality factors. Self-Esteem, Risk taking, Appearance anxiety, Locus of control, Public Self-Consciousness, Appearance motive, Social anxiety, Consumer Susceptibility to Interpersonal Influence, Consumer Self-confidence, Susceptibility to Televisions Advertising, and Body Esteem were the personality factors that were included in the study as independent variables. Also the researcher measured the perceptions of the respondents on whether some common problems are likely to lead to social embarrassment, and computed an index called 'social embarrassment'. Gender and income were the other variables that were considered important in the study as differences are expected in the independent variable as well as several independent variables on gender.

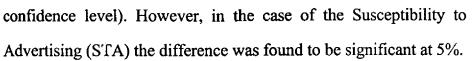
Significant gender differences are expected in consumption of personal care products as well as on independent variables like self-esteem, risk taking, CSII and body esteem. The variables included in the study were initially tested for significant differences if any in terms of gender. Analysis of Variance (ANOVA) was performed on the variables grouping the respondents into male and females, the results of which are presented in tables 4.4 given below.

Table 4.04 Gender wise differences in Variables-ANOVA

| Variables                                |                | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig.     |
|--|----------------|-------------------|-----|----------------|-------|----------|
| Self Esteem                              | Between Groups | 158.089           | 1   | 158.089        |       |          |
|  | Within Groups  | 10309.769         | 449 | 22.962         | 6.885 | 0.009    |
|  | Total          | 10467.858         | 450 |                |       |          |
| Risk taking                              | Between Groups | 217.185           | 1   | 217.185        |       | 0.006    |
|  | Within Groups  | 13004.341         | 449 | 28.963         | 7.499 |          |
|  | Total          | 13221.525         | 450 |                |       |          |
| Locus of Control                         | Between Groups | 11.37             | 1   | 11.37          | 0.426 | 0.514    |
|  | Within Groups  | 11973.353         | 449 | 26.667         |       |          |
|  | Total          | 11984.723         | 450 |                |       |          |
|  | Between Groups | 2.39              | 1   | 2.39           |       |          |
| Appearance Anxiety                       | Within Groups  | 13409.872         | 449 | 29.866         | 0.08  | 0.777    |
| · · · · · · · · · · · · · · · · · · ·    | Total          | 13412.262         | 450 |                |       |          |
|  | Between Groups | 21.445            | 1   | 21.445         |       |          |
| Public Self-consciousness                | Within Groups  | 4795.682          | 449 | 10.681         | 2.008 | 0.157    |
|  | Total          | 4817.126          | 450 |                |       |          |
|  | Between Groups | 19.375            | 1   | 19.375         | 3.703 | 0.055    |
| Appearance motive                        | Within Groups  | 2349.312          | 449 | 5.232          |       |          |
| ,  | Total          | 2368.687          | 450 |                |       |          |
|  | Between Groups |                   | 1   | 16.836         | 1.606 | 0.206    |
| Social anxiety                           | Within Groups  | 4706.401          | 449 | 10.482         |       |          |
| •  | Total          | 4723.237          | 450 |                |       |          |
|  | Between Groups | 564.12            | 1   | 564.12         | 12.46 | 0.000    |
| CSII                                     | Within Groups  | 20333.405         | 449 | 45.286         |       |          |
|  | Total          | 20897.525         | 450 |                |       |          |
|  | Between Groups | 0.129             | 1   | 0.129          |       | 0.948    |
| Customer Self Confidence                 | Within Groups  | 13563.348         | 449 | 30.208         | 0.004 |          |
|  | Total          | 13563.477         | 450 |                | 1     | 1        |
|  | Between Groups | 42.955            | 1   | 42.955         |       | <u> </u> |
| Susceptibility to Television Advertising | Within Groups  | 4687.937          | 449 |                | 4.114 | 0.043    |
| ,  | Total          | 4730.891          | 450 |                | 1     |          |
|  | Between Groups |                   | 1   | 2274.326       |       |          |
| Usage of personal care Products          | Within Groups  |                   | 449 | 16.791         | 135.5 | 0.000    |
|  | Total          | 9813.415          | 450 |                | 1     |          |
|  | Between Groups |                   | 1   | 826.164        | 11.36 | 0.001    |
| Body Esteem                              | Within Groups  | 32656.182         |     |                |       |          |
|  | Total          | 33482.346         |     | <del></del>    | 1     |          |
|  | Between Groups | <del></del>       | 1   | 162.543        | 3.71  | 0.055    |
| Social embarrassment                     | Within Groups  | 19671.741         | 449 | <del></del>    |       |          |
|  | Total          | 19834.284         | _   |                | 1     |          |

The differences were found to be significant at 1% in the case of Self Esteem, Risk Taking, Consumer Susceptibility to Interpersonal Influence (CSII), Usage of personal care products, and Body esteem. In the case of all other variables, the differences were found to be not significant at 1% (99%)

G9000





The respective groups sizes, means and standard deviations are provided in the table given below.

Table 4.05 Group Sizes, Mean and Standard Deviation of variables-Gender wise.

| Variables                                |        | N   | Mean    | Std. Deviation |
|--|--------|-----|---------|----------------|
|  | Male   | 253 | 28.3597 | 4.5102         |
| Self Esteem                              | Female | 198 | 27.1667 | 5.1295         |
|  | Total  | 451 | 27.8359 | 4.8231         |
|  | Male   | 253 | 30.166  | 5.3567         |
| Risk taking                              | Female | 198 | 28.7677 | 5.4135         |
|  | Total  | 451 | 29.5521 | 5.4204         |
|  | Male   | 253 | 41.3518 | 5.4437         |
| Locus of Control                         | Female | 198 | 41.6717 | 4.7824         |
|  | Total  | 451 | 41.4922 | 5.1607         |
|  | Male   | 253 | 33.8735 | 5.4284         |
| Appearance Anxiety                       | Female | 198 | 34.0202 | 5.5114         |
|  | Total  | 451 | 33.9379 | 5.4594         |
|  | Male   | 253 | 17.7273 | 3.0668         |
| Public Self-consciousness                | Female | 198 | 18.1667 | 3.5089         |
|  | Total  | 451 | 17.9202 | 3.2718         |
|  | Male   | 253 | 8.0672  | 2.2764         |
| Appearance motive                        | Female | 198 | 8.4848  | 2.3015         |
|  | Total  | 451 | 8.2506  | 2.2943         |
|  | Male   | 253 | 12.4743 | 3.3185         |
| Social anxiety                           | Female | 198 | 12.8636 | 3.1311         |
| _  | Total  | 451 | 12.6452 | 3.2398         |
|  | Male   | 253 | 28.6324 | 6.6407         |
| CSII Total                               | Female | 198 | 26.3788 | 6.8414         |
|  | Total  | 451 | 27.643  | 6.8146         |
|  | Male   | 253 | 34.2134 | 5.3743         |
| Customer Self Confidence                 | Female | 198 | 34.2475 | 5.6483         |
|  | Total  | 451 | 34.2284 | 5.4901         |
|  | Male   | 253 | 14.7115 | 3.1091         |
| Susceptibility to Television Advertising | Female | 198 | 15.3333 | 3.381          |
|  | Total  | 451 | 14.9845 | 3.2424         |
|  | Male   | 253 | 13.6719 | 3.7267         |
| Usage of personal care Products          | Female | 198 | 18.197  | 4.5282         |
|  | Total  | 451 | 15.6585 | 4.6699         |
|  | Male   | 253 | 60.7273 | 8.9775         |
| Body Esteem                              | Female | 198 | 58      | 7.9164         |
|  | Total  | 451 | 59.5299 | 8.6258         |
|  | Male   | 253 | 26.9368 | 7.0764         |
| Social embarrassment                     | Female | 198 | 28.1465 | 5.9834         |
|  | Total  | 451 | 27.4678 | 6.639          |

From Table 4.04 and 4.05, it is clear that Self-Esteem is lower for the females (17.1667) compared to males (28.3597). This is supported by the results reported in previous studies mentioned in the review of literature.. Females also show a lower propensity for risk taking (score of 28.7677) compared to the male segment (30.166). In the case of CSII, the scores are again significantly lower for the females (26.3788) compared to the male segment (28.6324). In the Body Esteem, females had lower body esteem (59.0) compared to males (60.7275)

The results revealed that the use of personal care products is significantly more in the case of females (18.197) compared to males (13.6719).

One may expect that since female use more of personal care products they have more of appearance anxiety and higher public Self-consciousness. However, the data do not support these assumptions. Since the gender, differences are observed to be significant in the case of the dependent variable which is the use of personal care products, wherever hypotheses is tested involving this variable, tests are separately reported for males and females. In certain other cases the aggregate results are provided clubbing together the two groups since the pattern is same across the gender.

Income is considered to be a very important indicator of the consumption in studies of consumer behaviour. There fore it may be expected that there are significant differences on the use of personal care

products between income groups. This notion is tested using analysis of variance, the results of which are provided in the following table.

Table 4.06 Use of personal care Products by family income ANOVA

| ANOVA          | Sum of Squares | Degrees of freedom | Mean<br>Square | F     | Significance. |
|----------------|----------------|--------------------|----------------|-------|---------------|
| Between Groups | 218.117        | 5                  | 43.623         |       |               |
| Within Groups  | 9160.499       | 434                | 21.107         | 2.067 | 0.069         |
| Total          | 9378.616       | 439                |                |       |               |

The results indicate that the differences in use of personal care products between income groups are not significant at 1% and 5%. The F value obtained is 2.067 with a corresponding probability value of 0.069. Contrary to apriori expectation, income does not seem to a differentiator in use of personal care products. This apparent anomaly can be explained as follows. The market for personal care products is a saturated and highly fragmented one with a large number of brands and variants at various price points to make them affordable to any segment of the population. If a certain brand were taken, income differences would have been observed. Further people of this age group are more concerned about their appearance and are relatively heavy users of personal care products. In addition, income profile indicates that the majority is belonging to middle income and high-income families and non-use because of affordability may not be a significant issue among this group. Based on this finding in subsequent analysis income is not considered as an influencer and the results are reported for the aggregated group ignoring the income differences.

#### 4.2 Factor Analysis and Data Reduction

The primary objective of the study was to explain differences in the consumption of personal care products using personality variables. The variables considered in the study were self-esteem, public self-consciousness, locus of control, risk taking, social anxiety, appearance anxiety, Appearance motive, Consumer's susceptibility to Interpersonal influence both normative and interpersonal influence, Consumer Self Confidence, Susceptibility to Television advertising, and Body Esteem.

As a first step a factor analysis was performed on these variables to explore the underlying common dimensions if any. Factor analysis can be categorized as an interdependence technique where all the variables are simultaneously considered. It is a multi-variate method whose primary purpose is data reduction and summarization. The method of factor analysis addresses the problem of analyzing the interrelationships among a large number of variables and then explaining these variables in terms of their common underlying dimensions (factors) These factors are some linear combination of the original variables and the factors are chosen in such a way that most of the variance present in the data is explained by the solution. The goal of factor analysis is to reach a parsimonious solution— one that explains the observed correlations between the variables with as few factors as possible (Stoetzel, 1960). Also the solution must be meaningful and

interpretable with conceptually similar variables loading on the same factors (Norusis 1992).

The factors were extracted using the method of principal components analysis. All factors with Eigen values above 1 were extracted. Varimax rotation was performed on the extracted factor structure to facilitate the interpretation of the factors as well as to ensure a parsimonious solution.

Factor analysis procedure initially computes the correlations between the variables, which is used as an input for subsequent analysis. At this stage it is important to test the appropriateness of factor analysis model with the given data or whether the data is suitable for conducting factor analysis. Two commonly used measures in this regard are Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The results of these two tests are provided below

Table 4.07 KMO and Bartlett's Test for factor analysis

| Test   | Measures                   |         |  |  |
|--|----------------------------|---------|--|--|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.754                      |         |  |  |
|  | Approximate Chi-<br>Square | 963.808 |  |  |
| Bartlett's Test of Sphericity                    | Degrees of Freedom 66      |         |  |  |
|  | Significance.              | .000    |  |  |

Table4.07 provides the results of the two tests used to determine the suitability of data to factor analysis. The KMO measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation

coefficients to the magnitude of the partial correlation coefficients. It is a statistic that indicates the proportion of variance caused by underlying factors (called common variance). Kaiser (1974) suggested that high values (close to 1.0) generally indicate it is appropriate to use factor analysis with the data. If the value is less than 0.50, the results of the factor analysis are generally found to be less reliable and difficult to interpret. Here the KMO value is 0.754 which is sufficiently high leading to the conclusion that it is appropriate to use a factor analysis with the data to reach meaningful conclusions as 75.4 % is common variance explained buy the underlying factors.

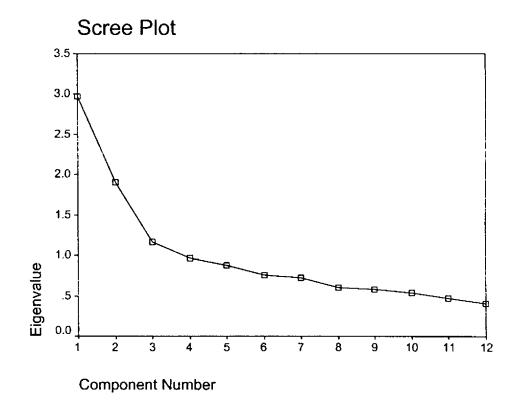
Bartlett's test of sphericity is used to test the hypothesis that the correlation matrix of variables is an identity matrix (a matrix where all diagonal terms are 1.0 and all off diagonal terms are zeroes), which would indicate that the variables are unrelated. Here the result is significant (Chi square=963.808 significant at 1%) and the hypothesis can be rejected leading to the conclusion that there are underlying relationships between the variables that may yield a pattern in the factor analysis.

Once the suitability of data for factor analysis is established, the second step is determining the number of factors to be extracted. Two commonly used methods for determining the number of factors are the criterion of eigen values and that based on scree plot (Hair et al 1990). Eigen value also called the latent root represents the amount of variance accounted for by a factor, which is a linear combination of the variables. Theoretically

if all the possible factors, which is equal to the number of the original variables, are extracted the factors together will explain all the variance (100%) in the data. However, this solution will not be in any way better than the original data. One approach is to extract all the factors with eigen values above 1. Using this as a criterion three factors may be extracted.

The second approach involves plotting the eigen values on Y axis along with the factors in the X axis to obtain a scree plot. The point at which the curve first begin to straighten out creating an elbow indicate the appropriate number of factors. The scree plot is provided below.

Chart 4.01 Scree plot for determining the number of factors



It is evident that there is a distinct knee or elbow at factor number 3 below which the curve straightens out. It was therefore decided to extract three factors based on the two criteria discussed.

Another test was conducted to determine the appropriate numbers of factors to be extracted using LISREL the statistical software. Null hypotheses that the number of factors explains the solution were tested at different number of factors the results of which are tabulated below.

Table 4.08 Decision Table for Number of Factors

| Factors | Chi2   | df | P     |
|---------|--------|----|-------|
| 0       | 972.47 | 66 | 0.000 |
| 1       | 406.81 | 54 | 0.000 |
| 2       | 129.64 | 43 | 0.000 |
| 3       | 54.40  | 33 | 0.011 |
| 4       | 30.75  | 24 | 0.161 |
| 5       | 7.81   | 16 | 0.954 |
| 6       | 3.91   | 9  | 0.917 |
| 7       | 0.37   | 3  | 0.946 |

It is clear that when the number of factors is above three, the p value is above 1% leading to acceptance of the null hypothesis. Therefore, the minimum number of factors required explaining most of the variance in the data is three and on grounds of choosing the simplest factor structure possible, it was decided to extract three factors.

There are various methods of extracting the factors of which the Principal Components analysis is very much popular in research. In Principal Components Analysis, linear combinations of the observed variables are formed which are orthogonal to each other. The first principal component is that linear combination which accounts for the largest amount of variance in the data. The second principal component is the next combination that accounts for the next largest amount of variance and is uncorrelated with the first. Successive combinations explain progressively smaller portions of the variance and all are un-correlated with each other. It is possible to compute as many principal components as there are variables, and this solution will explain the entire variance in the sample. However this solution does not serve any purpose. Therefore only a limited number of factors are extracted (in this case 3) which provides a parsimonious solution.

The results of the factor extraction are provided in the table given below.

Table 4.09 Total Variance Explained by the factor solution

|           |       | Initial Sol      | ution        |       | Extract          | ion             | Rotation |                  | on           |
|-----------|-------|------------------|--------------|-------|------------------|-----------------|----------|------------------|--------------|
| Component | Total | % of<br>Variance | Cumulative % | Total | % of<br>Variance | Cumulative<br>% | Total    | % of<br>Variance | Cumulative % |
| 1         | 2.977 | 24.808           | 24.808       | 2.977 | 24.808           | 24.808          | 2.853    | 23.779           | 23.779       |
| 2         | 1.908 | 15.896           | 40.704       | 1.908 | 15.896           | 40.704          | 1.686    | 14.052           | 37.831       |
| 3         | 1.170 | 9.750            | 50.454       | 1.170 | 9.750            | 50.454          | 1.515    | 12.623           | 50.454       |
| 4         | .964  | 8.030            | 58.485       |       |                  |                 |          |                  |              |
| 5         | .885  | 7.374            | 65.859       |       |                  |                 |          |                  |              |
| 6         | .758  | 6.316            | 72.174       |       |                  |                 |          |                  |              |
| 7         | .730  | 6.085            | 78.259       |       |                  |                 |          |                  |              |
| 8         | .609  | 5.074            | 83.333       | 1     |                  |                 |          |                  |              |
| 9         | .586  | 4.883            | 88.216       |       |                  |                 |          |                  |              |
| 10        | .537  | 4.477            | 92.693       |       |                  |                 |          |                  |              |
| 11        | .474  | 3.950            | 96.643       |       |                  |                 |          |                  |              |
| 12        | .403  | 3.357            | 100.000      |       |                  |                 |          |                  |              |

Extraction Method: Principal Component Analysis.

In the table the information is organized into three panels. The first panel provides the eigen values, total percentage of variance explained and the cumulative variance explained for the initial solution. It is seen that if the same number of factors as the number of variables are extracted, all the variance may be explained. Since three factors with eigen values above 1 were extracted, the three factors explain 50.454 % of the total variance which is shown in the panel 2. To facilitate ease of interpretation, Varimax rotation was performed which operates by reallocating the variance among the three factors. The eigen values, variance explained and the cumulative variance explained are shown in panel three.

In a good factor analysis which is considered to be parsimonious, there are a few factors that explain a major part of the variance and the rest of the factors explain relatively small amounts of variance which is clearly the case here.

The loadings of the original variables with the new factors extracted are provided in the table given below. When the factors are orthogonal these factor loadings can be taken as the correlations of the variables with the extracted factors.

**Table 4.10 Component Matrix** 

| Variable                                 |      | Factor |      |
|--|------|--------|------|
| r at table                               |      | 2      | 3    |
| Appearance Anxiety                       | 731  | .112   | 261  |
| Self Esteem                              | .684 | .266   | .161 |
| Consumer Self Confidence                 | .648 | .338   | 171  |
| Locus of Control                         | .575 | .220   | 106  |
| Social anxiety                           | 568  | 104    | 148  |
| Body Esteem                              | .552 |        | .252 |
| Risk taking                              | .448 | .244   | 256  |
| appearance motive                        | 168  | .733   | 322  |
| Public Selfconsciousness                 | 296  | .711   | 341  |
| Susceptibility to Television Advertising |      | .416   | .289 |
| CSII Informational                       | 275  | .487   | .543 |
| CSII Normative                           | 452  | .370   | .535 |

Extraction Method: Principal Component Analysis.

The correlations of the original variable with the extracted factors are given in the table above. The variables are sorted in the order of decreasing correlations and the correlations less than 0.15 are not shown. However, the un-rotated factor solution is difficult to interpret since many

<sup>3</sup> components extracted.

variables show high loadings with more than one factor. Though the factor matrix obtained after extraction has indicated the relationships between the factors and the individual variables, the solutions is difficult to interpret. Since the goal of the factor analysis is to identify the factors that are substantively meaningful- that summarize the sets of related variables, rotation is a method that is subsequently used to transform the initial matrix into one that is easier to interpret.

The purpose of rotation is to achieve a simple structure and the methods of rotation can be classified into orthogonal and oblique. In the orthogonal rotation, the rotation is done in such a way that the factors are maintained orthogonal to each other. In oblique rotation the angle between the factors when geometrically represented can be different from a right angle. Though a variety of algorithms can be used for rotation, the most commonly used method is varimax which is an orthogonal method.

An un-rotated factor solution may or may not provide meaningful patterning of variables. To some extent this is because Principal Component Analysis extracts factors in the order of importance where the first factor is a general factor that correlates with almost all variables and accounts for the largest part of variance. The second and third factors are then based on the residual variance. The effect of rotating the factor matrix is to redistribute the variance from earlier factors to later ones to achieve a simpler, theoretically more meaningful factor pattern (Hair et al 1990 pp 243-246). In varimax

method the objective is to make the variables correlate high with only one variable.

The results from the rotated solution are provided below.

Table 4.11 Rotated Component Matrix

| Wantable.                                |      | Factor |      |
|--|------|--------|------|
| Variable                                 | 1    | 2      | 3    |
| Self Esteem                              | .745 |        |      |
| Consumer Self Confidence                 | .700 | .239   | 125  |
| Appearance Anxiety                       | 682  | .385   |      |
| Locus of Control                         | .601 | .123   | 118  |
| Social anxiety                           | 584  | .118   |      |
| Body Esteem                              | .560 | 225    |      |
| Risk taking                              | .474 | .256   | 191  |
| Public Self-consciousness                |      | .815   | .193 |
| Appearance motive                        |      | .796   | .186 |
| CSII Informational                       |      | .110   | .769 |
| CSII Normative                           | 257  |        | .747 |
| Susceptibility to Television Advertising | .155 | .153   | .458 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

The rotated component matrix shown above yields a three-factor solution where most of the variables are found to be correlated with separate factors. Self-Esteem, customer self-confidence, locus of control and body esteem are positively correlated with Factor 1 whereas appearance anxiety and social anxiety are negatively correlated. All the correlations are clearly

a. Rotation converged in 7 iterations.

above 0.5. The second factor is a composite of Public self consciousness and appearance motive while the third factor represents the susceptibility to influence domain with both components of Susceptibility to interpersonal influence showing high positive correlation with it. In addition the Susceptibility to television advertising show a moderate positive correlation to the third factor. Risk taking shows an ambiguous position since it is correlated with more than one factor.

From the factor analysis it is evident that the variables can be grouped into three factors which are more or less independent of each other. The first factor can be interpreted as the component of the self dimension that include evaluation of oneself. Self Esteem, Customer Self Confidence and locus of control show high positive correlations to this factor whereas the anxiety variables, both social anxiety and appearance anxiety show a high negative correlation. A person who score high on this dimension will show high self esteem, high customer self confidence, and an internal locus of control while scoring low on appearance anxiety and social anxiety. This reveals that that the person has high self worth, consider him self a master of his destiny, is confident of his decisions while less susceptible to anxieties. This can be interpreted as evidence of autonomy in behaviour and decision-making. So it could be proper to label this dimension as characteristic of self-evaluation.

The second factor is clearly a composite of Public Self Consciousness and appearance motive. An individual who score high on this

dimension is conscious of his public image or in other words what others perceive about him. He is also motivated to improve his public persona or his appearance more specifically. Here the individual's personality is more oriented to the impressions he forms about what he thinks others perceive about him. This dimension is conceptually very similar to the public-self dimension described in the self-perception theory. It can be also interpreted to be the self-awareness, which is the awareness of the self as a social object.

The third factor is a composite of the three variables namely the normative and interpersonal dimensions of Customer Susceptibility to Interpersonal Influence and the Susceptibility to Television Advertising. An interpretation that is obvious is that this factor is the Susceptibility to influence or persuasibility.

Therefore the three factors may be named as self-evaluation,
Public Self or self awareness and the Susceptibility to Influence or
persuasibility.

Once the factors were identified and interpreted, there can be two approaches for proceeding with further analysis trying to establish relationships with the dependent variable. Hair et.al. (1990), outlined two alternative methods in this regard. The variable with highest factor loading with a given factor may be selected as the surrogate variable representing that factor dimension. In the given case it is seen that Self-Esteem shows highest

factor loading with the first dimension (0.745) Public Self Consciousness is the variable that shows the highest factor loading with the second factor (0.815) With regard to the third factor the two dimensions of Consumer Susceptibility to Interpersonal Influence namely the normative Dimension (CSII-N) and the Informational Dimension (CSII-I) show the highest factor loadings (0.767 and 0.749 respectively). Therefore the variables, Self-Esteem, Public Self Consciousness and the total of normative and Informational dimensions as CSII were taken as the surrogate variables to conduct further analysis establishing relationships with the dependent variable.

Further the variables under each factor domain were also examined and the relationships were explored between them to facilitate better understanding. The results of such analysis are provided elsewhere.

The second approach suggested by Hair et.al.(1990 is to compute the factor scores and to use the factor scores as composite measures to represent the dimensions. Factor Scores may be computed using various methods of which the regression method was used to compute the factor scores in the present study. These factor Scores that represent the individual respondent on the three underlying dimensions were further used in Binary Logistic Regression procedure to predict whether the respondents are light or heavy users of personal care products. The results of the binary logistic regression are provided later in the chapter.

# 4.3 Relationship of variables under Factor 1 Domain

There were seven variables under the domain of factor 1 namely Self Esteem, Consumer Self Confidence, Appearance Anxiety, Locus of Control, Social anxiety, Body Esteem and Risk taking. Of these seven variables self-esteem was chosen as the surrogate variables since it had the maximum factor loading with factor 1(0.745 after rotation). It may be understood from then factor analysis that all the remaining six variables under factor 1 are related to self-esteem. However, precise nature of the relationships is important to explain the process under study in the light of theoretical models. Therefore the relationship of self-esteem to the other variables are explored further by setting up hypotheses and testing them

# 4.3.1 Self-Esteem and its relationships with other variables under factor 1

The relationships between Self-Esteem, Locus of Control scores and risk taking were first explored by computing the correlation coefficients. The correlations were tested for significance. The results are tabulated given below.

Tables 4.12 Correlation of Self-Esteem with Locus of Control and Risk taking

| Correlation of Self Esteem with | Locus of Control | Risk taking |  |
|---------------------------------|------------------|-------------|--|
| Correlation (Pearson) r         | 0.384            | 0.233       |  |
| Significance                    | 0.000            | 0.000       |  |
| Group Size                      | 451              | 451         |  |

From the table above, it is evident that self-esteem has significant moderate correlations with the other two variables. The correlations are significant at 1%. It may be inferred that as self esteem increases, scores on locus of control and risk taking increases. One is likely to be more risk taking with increase in self-esteem. In addition, it is likely that since the locus of control scores are positively correlated with self-esteem, high self-esteem is associated with an internal locus of control. In order to explore these relations, specific hypothesis were formulated and tested. Subgroups were created by the median split to enable inter-group comparisons.

The first hypothesis was about the relation between self-esteem and locus of control. Internals consider themselves responsible for their successes and this internal attribution will lead to enhanced self esteem. Therefore, internals must show a higher self- esteem compared to externals.

Hypothesis 1. Persons with internal locus of control will have significantly higher self-esteem than persons with external locus.

This hypothesis was tested by computing the t-test statistic the results of which are tabulated below.

Table 4.13 T Test – Self Esteem by locus of control.

| Loons of Control | Self Esteem    |         |        |       |              |  |
|------------------|----------------|---------|--------|-------|--------------|--|
| Locus of Control | Group Size (n) | Mean    | SD     | t     | Significance |  |
| Internal         | 250            | 29.4826 | 4.6012 | 6 922 | 0.000        |  |
| External         | 201            | 26.5120 | 4.5920 | 6.822 |              |  |

The results reveal that the difference between internals and externals on self-esteem scores is significant at 1%. Further since the mean value of the internals is higher than that of externals further lending credence to accepting the assumption.

In addition to t-test, the frequencies of the internals and externals were cross tabulated against the groupings of low and high self-esteem and a chi-square test was performed. The results are provided in the table given below.

Table 4.14 Cross Tabulation and Chi Square Test -Self
Esteem and Locus of Control

| F                | Locus o  | f Control | Total | Clic            |        |  |
|------------------|----------|-----------|-------|-----------------|--------|--|
| Frequencies      | Internal | External  |       | Chi Square Test |        |  |
| Low Self Esteem  | 84       | 163       | 247   | Chi Square      | 24.646 |  |
| High Self Esteem | 117      | 87        | 204   | 0               | 0.000  |  |
| Total            | 201      | 250       | 451   | Significance    |        |  |

Here also the majority of respondents having low self-esteem (163 out of 247) are found to be externals while the majority of high self-esteem respondents (117 out of 204) are internals. The chi-square value is 24.646 and is significant at 1%.

It may be concluded that people of high self-esteem are likely to have an internal locus of control and those with low self-esteem are likely to have externals locus of control.

Another evident pattern from the correlations is that between self-esteem and risk taking. Since self-esteem scores are positively correlated with risk taking, people of high self-esteem are likely to score high in risk taking also. This is expected as high self-esteem individuals are surer of their judgments in risky situations and are less afraid of failures. The hypothesis was framed accordingly which is provided below.

Hypothesis 2. Persons with high self-esteem show significantly more risk taking than persons with low self-esteem.

The results from the t test are provided below.

Table 4.15 T Test – Risk taking at levels of self esteem.

| Self-Esteem | Risk taking    |         |        |        |              |  |
|-------------|----------------|---------|--------|--------|--------------|--|
| Sen-Esteem  | Group Size (n) | Mean    | SD     | t      | Significance |  |
| Low         | 247            | 28.6478 | 5.5003 | 2 062  | 0.000        |  |
| High        | 204            | 30.6471 | 5.1253 | -3.962 | 0.000        |  |

The mean risk taking scores for low and high groupings of self-esteem are 28.6478 and 30.6471 respectively. The corresponding t value is 3.962, which is significant at 1%. It may be concluded that high self-esteem individuals are more prone to risk taking compared to those who score lower.

## Self Esteem and Social Anxiety

Social anxiety is the experienced discomfort or unease in the presence of others. People of low self-esteem are less sure of themselves is prone to anxieties especially about the evaluations of others. Since their self-

esteem is dependent on the perceived regard of others, they will exhibit a higher level of social anxiety. It is posited that people of low self esteem are likely to have a higher social anxiety and the hypothesis formulated is provided below.

Hypothesis 3 People with low self-esteem show significantly higher social anxiety than those with high self esteem.

The hypothesis was tested for both males and females separately as well as for the combined group.

Table 4.16 T Test – Social anxiety at levels of self-esteem

|        |             | Social Anxiety    |         |        |       |              |  |
|--------|-------------|-------------------|---------|--------|-------|--------------|--|
| Gender | Self-Esteem | Group<br>Size (n) | Mean    | SD     | t     | Significance |  |
| Male   | Low         | 125               | 13.4560 | 2.9471 | 4.854 | 0.000        |  |
| Male   | High        | 128               | 11.5156 | 3.3905 |       | 0.000        |  |
| Female | Low         | 122               | 13.4508 | 2.9823 | 3.434 | 0.001        |  |
| remaie | High        | 76                | 11.9211 | 3.1528 |       | 0.001        |  |
| Doth   | Low         | 247               | 13.4534 | 2.9585 | ( 05( | 0.000        |  |
| Both   | High        | 204               | 11.6667 | 3.3020 | 6.056 | 0.000        |  |

For the combined groups, the social anxiety scores are 13.4534 and 11.6667 respectively in the case of low and high self-esteem. This difference is significant at 1% (t value 6.056). It may be concluded that people of low self esteem experience a higher social anxiety compared to those who have high self-esteem. Similar results are obtained in the case of sub groups of males and females.

# Self-esteem and Appearance anxiety

Appearance anxiety is the unease one has about his or her physical appearance. This also has a social component as anxiety is rooted in one fear of being evaluated by others. Concern about one's appearance need not be objective but perceptual. One may worry about the appearance, as it would appear to others. Similar to social anxiety, appearance anxiety is expected to be related to self-esteem. People of low self-esteem are more worried about the regard of others and are likely to have higher appearance anxiety. The hypothesis was developed accordingly, which is stated below.

Hypothesis 4 People with low self-esteem show significantly higher appearance anxiety than those with high self esteem.

Table 4.17 T Test - Appearance anxiety at levels of self-esteem.

| Condon | Self-Esteem | Appearance Anxiety |         |        |       |              |  |
|--------|-------------|--------------------|---------|--------|-------|--------------|--|
| Gender | Sen-Esteem  | Group Size (n)     | Mean    | SD     | t     | Significance |  |
| Mala   | Low         | 125                | 35.4880 | 5.2481 | 4 000 | 0.000        |  |
| Male   | High        | 128                | 32.2969 | 5.1487 | 4.882 |              |  |
| Famala | Low         | 122                | 35.1311 | 5.3334 | 2 700 | 0.000        |  |
| Female | High        | 76                 | 32.2368 | 5.3538 | 3.708 | 0.000        |  |
| Both   | Low         | 247                | 35.3117 | 5.2827 | 6 112 | 0.000        |  |
|        | High        | 204                | 32.2745 | 5.2130 | 6.113 | 0.000        |  |

In the case of males and females as well as both groups clubbed together, the appearance anxiety mean scores are significantly higher in the case of low self-esteem. In all the three cases the differences are significant

at 1%. The null hypothesis that there are no significant differences be rejected and the initial proposition accepted. Persons of low self-esteem show higher appearance anxiety compared to those having higher self-esteem.

### Self-esteem and Body-esteem

Body esteem is another variable under the factor 1. It is the regard one has towards his or her body. An important part of the self-concept is the body concept and one having high self-regard is likely to have a similarly high regard for his body also. Here again the body esteem need not be based on objective body shape and features, but an evaluation of perceived body attractiveness. It may be posited that high self-esteem is associated with high body esteem and the hypothesis is framed accordingly.

Hypothesis 5 People with low self-esteem show significantly lower body esteem than those with high self-esteem. The test results for both subgroups of males and females as well as for the combined groups is given below.

Table 4.18 T Test – Body Esteem at levels of self-esteem.

| Candan | Calf Estara | Body Esteem    |         |        |        |              |  |
|--------|-------------|----------------|---------|--------|--------|--------------|--|
| Gender | Self-Esteem | Group Size (n) | Mean    | SD     | t      | Significance |  |
| Male   | Low         | 125            | 58.2640 | 8.4921 | -4.473 | 0.000        |  |
| Maie   | High        | 128            | 63.1328 | 8.8151 | -4.4/3 |              |  |
| Famala | Low         | 122            | 55.8770 | 7.4519 | -5.072 | 0.000        |  |
| Female | High        | 76             | 61.4079 | 7.4783 | -3.072 |              |  |
| Both   | Low         | 247            | 57.0850 | 8.0681 | -6.964 | 0.000        |  |
|        | High        | 204            | 62.4902 | 8.3651 | -0.904 | 0.000        |  |

The body esteem scores are found to be higher in the case of high self-esteem individuals in all the three groups. The differences are found to be significant at 1%. It is evident that people of high self-esteem show a higher body esteem and this pattern is true in both males and females. A high self-regard is associated with a high regard of one's body also.

#### Self-esteem and consumer self confidence

Consumer self-confidence is conceptually related to self-esteem and is the degree of assurance one has as a consumer. It is a specific marketing related variable which is related to the more general construct of self-confidence. People of high self-esteem exhibit an assurance in their abilities and are confident of their judgments in purchasing situations. So it is expected that high self-esteem and high customer self-confidence are associated and low self-esteem and low consumer self-confidence are associated. The proposed relationship is stated in the form of a hypothesis below.

Hypothesis 6 Consumer self confidence is significantly lower in persons of low self-esteem compared to those with high self esteem.

Table 4.19 T Test - Consumer Self Confidence at levels of self-esteem

| Salf Estaam | Customer Self Confidence |         |        |        |              |  |  |
|-------------|--------------------------|---------|--------|--------|--------------|--|--|
| Self-Esteem | Group Size (n)           | Mean    |        | t      | Significance |  |  |
| Low         | 247                      | 32.6397 | 5.2137 | 7.126  | 0.000        |  |  |
| High        | 204                      | 36.1520 | 5.2043 | -7.126 |              |  |  |

As expected, people of low self-esteem show lower confidence. The difference is significant at 1% (t- value 7.126). People of low self-esteem are less sure of themselves and may have less trust in their abilities and knowledge with regard to the various market interfaces. They are more likely to seek the help, advice and conformation from others.

From the above results, it is clear that the variables under the factor 1 are related to each other. The precise nature of the relationships was also explored. People of low self-esteem are likely to have an external locus of control, are less risk taking, have more of social anxiety, more of appearance anxiety and less body esteem. This groups is likely to consider some common physical imperfections and skin problems as very embarrassing. The researcher had conceptualised and developed such a variable 'Social embarrassment', which represent the perceptions of respondents on the social embarrassment potential some common problems. It is expected that people of low self-esteem consider physical deficiencies more embarrassing compared to those with high self-esteem.

#### Self-esteem and Social embarrassment

Hypothesis 7 People with low self-esteem consider physical deficiencies more embarrassing socially than those with high self-esteem.

Table 4.20 T Test – Social embarrassment and self-esteem

| Call Essage | Social embarrassment |         |        |       |              |  |  |
|-------------|----------------------|---------|--------|-------|--------------|--|--|
| Self-Esteem | Group Size (n)       | Mean    | SD     | t     | Significance |  |  |
| Low         | 247                  | 28.1498 | 6.4340 | 2.412 | 0.016        |  |  |
| High        | 204                  | 26.6422 | 6.8037 | 2.413 |              |  |  |

The mean scores of social embarrassment indicate that it is higher with those of low self-esteem and this difference is significant at 5%.

The general pattern that emerges from these relationships is that people of low self-esteem have poorer self-perceptions show more anxiety and consider minor physical deficiencies to be socially embarrassing. This makes such a group susceptible to the use of products that are aimed at improving one's appearance.

# 4.3.2 Relationships among variables under Factor 2

There were two variables public self-consciousness and appearance motive having high factor loadings with the factor 2, which was interpreted as the 'Public Self' or Self-awareness. Since both the loadings were positive, it may be concluded that appearance motive increases with increase in public self-consciousness. The correlation between these variables is provided below.

Table 4.21 Correlation between Public Selfconsciousness and Appearance motive.

| Correlation of Public Self-consciousness with | Appearance Motive |
|---|-------------------|
| Correlation (Pearson) r                       | 0.505             |
| Significance                                  | 0.000             |
| Group Size                                    | 451               |

The reported correlation is high and is significant at 1%. Consistent with this finding a specific hypothesis was formulated for testing.

Hypothesis 8. People of high public self-consciousness will have significantly higher appearance motive compared to those who score lower.

The hypothesis was tested and the results are provided below.

Table 4.22 Appearance Motive at levels of Public Self-consciousness –T test

| Public Self-  | Appearance Motive |        |        |        |              |  |  |
|---------------|-------------------|--------|--------|--------|--------------|--|--|
| consciousness | Group Size (n)    | Mean   | SD     | t      | Significance |  |  |
| Low           | 256               | 7.4453 | 2.1100 | -9.319 | 0.000        |  |  |
| High          | 195               | 9.3077 | 2.0926 | -9.319 |              |  |  |

The mean score of appearance anxiety for those with high public self-consciousness is 9.3077 which is higher that of the low group (7.4453). This difference is found to be significant at 1% (t value 9.319). It may be concluded that people of high public self-consciousness have more of appearance motive. This is justifiable since public self-consciousness is a

concern about one's public image and external appearance is an important part of the self-perceptions of one's public image. These people are motivated to improve their appearance to achieve a better public image.

### 4.3.4 Relationships among variables under Factor 3 (Persuasibility Domain)

There were three variables having high loadings with the factor 3, which was interpreted as the persuasibility factor. They were CSII Informational, CSII Normative and Susceptibility to Television Advertising. The first two are two dimensions of the construct 'Consumer Susceptibility to Interpersonal Influence'. Generally the research in persuasibility has suggested that it may be a general disposition and various measures in different contexts are likely to be correlated. Again, from the factor analysis it is seen that all the three variables show positive factor loadings to the same factor. Therefore, correlations were computed between the three variables, which is given in table below.

Table 4.23 Correlations between variable measuring persuasibility

|  |                 | CSII<br>Normative | CSII<br>Informational | Susceptibility to<br>Television<br>Advertising |
|--|-----------------|-------------------|-----------------------|--|
| CSII   | Correlation     | 1.000             | 0.398                 | 0.144  |
| Normative                                      | Sig. (2-tailed) | ,                 | 0.000                 | 0.002  |
| CSII   | Correlation     | 0.398             | 1.000                 | 0.118  |
| Informational                                  | Sig. (2-tailed) | 0.000             |                       | 0.012  |
| Susceptibility<br>to Television<br>Advertising | Correlation     | 0.144             | 0.118                 | 1.000  |
|  | Sig. (2-tailed) | 0.002             | 0.012                 |  |

As expected it is seen that the variables show significant positive correlations with each other. The correlations is highest in the case of two variables which are the sub dimensions of the CSII scale namely the informational and normative components. Here the correlation is significant at 1%. Susceptibility to Television Advertising also had positive correlations with the dimensions of CSII, which are significant at 5%. These results are consistent with the research findings reported in literature.

# 4.4 Relationships between the surrogate variables (between factors)

Once the factors were extracted and interpreted, one common approach is to use as surrogate variable, the variable having the highest loading with that factor. In the study, it was decided to take Self-Esteem as surrogate variable for Factor 1 and Public Self-Consciousness for factor 2. For the third factor, since the two dimensions of the CSII are there both showing high loadings, it was decided to use the summated score representing CSII as the surrogate variable. Though factor analysis yield orthogonal solutions where the factors are uncorrelated, this may not be true in the case of constituent variables. Therefore it was decided top explore the relationship between the surrogate variables.

#### 4.4.1 Self-Esteem and CSII

There are studies that explored the relationships between selfesteem and CSII cited in literature review. It is reported that generally people of low self-esteem are more persuasible and small but significant correlations are often reported between self-esteem and constructs in persuasibility.

Customer Susceptibility to Interpersonal Influence has two dimensions, one normative and the other Informational. Persons of low self-esteem are more likely to look at others for reassurance in their decisions compared to those who score high. However, it is not likely that there are any differences in the informational dimension of CSII. Therefore, the following hypotheses are formulated for testing.

# Hypothesis 9

- a. The scores on the normative dimension of CSII is significantly higher in the case of persons with low self-esteem compared to those with high self-esteem for both males and females.
- b. There is no difference in the scores of informational dimension of Susceptibility to interpersonal influence between people with high self-esteem and those with low self esteem for both males and females.

The results of the t-test is reported below

Table 4.24 Consumer Susceptibility to Interpersonal Influence at levels of Self-Esteem- T Test

| Gender | Self-           | Susceptibility to interpersonal influence-Normative Dimension     |         |        |        |              |  |  |
|--------|-----------------|---|---------|--------|--------|--------------|--|--|
| Gender | Esteem          | Group Size (n)  | Mean    | SD     | t      | Significance |  |  |
| Mala   | Low             | 125   | 18.0800 | 5.0778 | 2.736  | 0.007        |  |  |
| Male   | High 128        | 128   | 16.3125 | 5.1965 | 2.730  | 0.007        |  |  |
| Famala | Low             | 122   | 15.6721 | 5.0049 | 2.253  | 0.025        |  |  |
| Female | High            | 76  | 14.0658 | 4.6686 |        |              |  |  |
| Candan | Self-<br>Esteem | Susceptibility to interpersonal influence-Informational Dimension |         |        |        |              |  |  |
| Gender |                 | Group Size (n)  | Mean    | SD     | t      | Significance |  |  |
| Mala   | Low             | 125   | 11.4800 | 2.8273 | 0.106  | 0.952        |  |  |
| Male   | High            | 128   | 11.4141 | 2.8187 | 0.186  | 0.853        |  |  |
| Famala | Low             | 122   | 11.2541 | 2.9389 | 0.429  | 0.662        |  |  |
| Female | High            | 76  | 11.4342 | 2.5992 | -0.438 |              |  |  |

From the table it may be seen that the scores on the normative dimension of CSII are higher in the case of people of low self esteem compared to the high self-esteem group. The differences in case of males are significant at 1% and that among females significant at 5%. It may be concluded that people of low self-esteem are more susceptible to persuasion especially coming out of the normative comparisons with others.

In the case of informational dimension, no significant differences are observed in either males or females.

#### 4.4.2 Self-esteem and Public Self-consciousness

Self-esteem and public self-consciousness are both variables from the self-domain. While the former is an evaluation of self, the latter is more of awareness of self as a social object. The factor analysis revealed that these variables load favorably on two different factors. In order to explore the relationships if any between these variables, correlation was computed and the results are provided below.

Table 4.25 Correlation between Self-esteem and Public Self-consciousness

| Correlation of Public Self-consciousness with | Self-Esteem |
|---|-------------|
| Correlation (Pearson) r                       | -0.070      |
| Significance                                  | 0.139       |
| Group Size                                    | 451         |

The correlation coefficient obtained is almost equal to zero, which indicated that the two variables are unrelated or orthogonal. To test this further, a t test was performed on Public self-consciousness scores at levels of self-esteem, which is provided below.

Table 4.26 Public Self-consciousness at levels of Self-esteem- T test

| Salf Estados | Public Self-consciousness |         |        |       |              |  |  |
|--------------|---------------------------|---------|--------|-------|--------------|--|--|
| Self-Esteem  | Group Size (n)            | Mean    | SD     | t     | Significance |  |  |
| Low          | 247                       | 17.9549 | 3.3262 | 0.201 | 0.779        |  |  |
| High         | 204                       | 17.8725 | 3.2123 | 0.281 |              |  |  |

It is seen that the differences are not significant and therefore it may be concluded that self-esteem and public self-consciousness are orthogonal and measures different aspects of the self-concept.

# 4.5 Self-Esteem, Public Self-consciousness and Consumption of Personal care products.

Self-esteem and public self-consciousness were identified as the surrogate variables from the factor analysis procedure since they had highest loadings with factors one and two respectively. The preceding analysis concluded that these two variables are not related to each other. The third surrogate variable CSII was however related to self-esteem.

From the preceding sequence of analysis, it was established that self-esteem is related to social anxiety, appearance anxiety, body esteem, consumer self confidence, normative dimension of CSII and social embarrassment.

Since those with low self esteem are having more of social anxiety, appearance anxiety, score more on the normative dimension of CSII, lower customer Self Confidence, lower body esteem and consider physical deficiencies to be more embarrassing, they are expected to consume more of personal care products. People of low self-esteem are concerned about impressions of others. They may also engage in upward comparisons and find themselves lacking. They have less regard about their attractiveness and

are anxious about their social acceptance and appearance. They also consider minor physical deficiencies to be more embarrassing than those of high self-esteem do. All this evidence indicate that they are likely to be motivated to improve their physical appearance and personal care products offer a method of immediate results in self-improvement. So it is reasonable to assume that people of low self-esteem consumer more of personal care products. Accordingly, the hypothesis is formulated and tested.

Hypothesis 10 Use of personal care products is significantly more in the case of people with low self esteem compared to those with high self esteem.

The results of the t test are provided below.

Table 4.27 T test Use of personal care products and self-esteem

| Gender | Calf Fataam | Use of personal care products |         |        |        |              |  |
|--------|-------------|-------------------------------|---------|--------|--------|--------------|--|
|        | Sen-Esteem  | Group Size (n)                | Mean    | SD     | t      | Significance |  |
| Mala   | Low         | 125                           | 13.8320 | 3.7840 | 0.674  | 0.501        |  |
| Male   | High        | 128                           | 13.5156 | 3.6779 | 0.674  |              |  |
| Female | Low         | 122                           | 17.9098 | 4.7586 | 1 121  | 0.259        |  |
|        | High        | 76                            | 18.6579 | 4.1200 | -1.131 |              |  |

It is seen that there is no significance difference between people of low self-esteem and high self-esteem in the use of personal care products. The results are the same for both gender. In the light of this evidence, the theory that people of low self-esteem are likely to use more of personal care products is to be rejected. However, such people may have social and

appearance anxiety, and consider physical deficiencies more embarrassing, this does not result in consumption of personal care products. One conclusion may be that the motive to improve their appearance may not be higher in the case of low self-esteem individuals. This was tested and the results are provided in the following table.

Table 4.28. Self-esteem and appearance motive- t test

| Gender  | Self-Esteem | Appearance motive |        |        |        |              |  |
|---------|-------------|-------------------|--------|--------|--------|--------------|--|
| Genuer  | Sell-Esteem | Group Size (n)    | Mean   | SD     | t      | Significance |  |
|         | Low         | 125               | 8.0000 | 2.3418 |        | 0.644        |  |
| Male    | High        | 128               | 8.1328 | 2.2179 | -0.463 |              |  |
| Formala | Low         | 122               | 8.3361 | 2.3341 | 1 154  | 0.250        |  |
| Female  | High        | 76                | 8.7237 | 2.2426 | -1.154 |              |  |

The results reveal that there are no significant differences between low and high self-esteem subjects on appearance motive and naturally, there may not be a difference in purchase behaviour also with respect to personal care products.

Public Self-consciousness indicates the awareness of an individual about himself as a social object. A person who is high in public self-consciousness is likely to be concerned about his image especially as it would appear to others. It is already seen that public self-consciousness and appearance motive are related variables and load heavily on the same factor. Therefore it is reasonable to expect that public self-consciousness be related to consumption of personal care products. To explore this relationship, correlation coefficient was

computed between public self-consciousness and consumption of personal care products, which is provided in table given below.

Table 4.29 Correlation- Public self-consciousness and Usage of personal care products.

| Correlation of Public Self-consciousness with | Usage of personal care products |
|---|---------------------------------|
| Correlation (Pearson) r                       | 0.188                           |
| Significance                                  | 0.000                           |
| Group Size                                    | 451                             |

It is seen that the variable public self-consciousness has a slight correlation with the use of personal care products. What is to be noted that though the correlation is low, it is significant at 1%. This is definite indication that there is some relation between public self-consciousness and use of personal care products. To have more tangible proof on this association, the following hypothesis was tested.

Hypothesis 11. The use of personal care products is significantly higher in people of high public self-consciousness compared to those who score low in this dimension.

The results of the test are provided in the table below.

Table 4.30. T-Test: Use of personal care products at levels of public self-consciousness

| Gender    | Public self   | Use of personal care products |         |        |         |              |  |
|-----------|---------------|-------------------------------|---------|--------|---------|--------------|--|
| Gender    | consciousness | Group Size (n)                | Mean    | SD     | t       | Significance |  |
| Mala      | Low           | 155                           | 13.1484 | 3.7569 | -2.850  | 0.005        |  |
| Male High |               | 98                            | 14.50   | 3.5414 | -2.830  | 0.003        |  |
| Esmala    | Low           | 101                           | 17.5238 | 4.7473 |         | 0.0225       |  |
| Female    | High          | 97                            | 18.8938 | 4.2302 | -2.1458 | 0.0335       |  |

The mean scores of use of personal care products for the males are 13.1484 and 14.5 respectively for the low and high public self-consciousness groups respectively. The difference is significant 1% (t value of 2.850). In the case of females, the mean values are 17.5238 and 18.8938 respectively for low and high public self-consciousness. Here again the difference is significant albeit at 5%.

In both males and females there were significant differences in the use of personal care products and in both cases, people of high public self-consciousness were seen to consume more of personal care products. This is to be expected as it is already found that people of high public self-consciousness do have higher appearance motive. Since they are concerned about their public image and do have a high motive to improve their appearance, it is only natural that they are relatively heavy users of personal care products.

It is seen that there are differences in consumption of personal care products between people of high and low public self-consciousness. From the previous analysis, it was revealed that people of low self-esteem do have higher social anxiety, higher appearance anxiety, lower body esteem and high persuasibility, which make them susceptible to consumption of personal care products. Nevertheless, they were not found to have high appearance motive and the consumption of personal care products was not high. Not all people with low self-esteem may have higher appearance motive. Possibly that among such people only those with high public selfconsciousness may have a high appearance motive and only they may use personal care products heavily. Since low self esteem leads to poor selfperceptions and consequently negative evaluations of one's body and its attractiveness, such people may show an increased consumption compared to all others. It was hypothesized that low-self esteem may have an influence on the relationship between public self-consciousness and consumption. This view was explored further by setting up hypothesis, which is stated below.

### Hypothesis 12.

- a. Appearance motive is significantly higher for those with low selfesteem and high public self-consciousness compared to all others.
- b. Use of personal care products is significantly more for those with low self-esteem and high public self-consciousness compared to all others.

The results of the test are provided below.

Table 4.31 Use of personal care products and appearance motive for people of low self-esteem and high public self-consciousness compared to all others.

| Crowns                       | Use of personal care products |         |        |       |              |  |
|------------------------------|-------------------------------|---------|--------|-------|--------------|--|
| Groups                       | Group Size (n)                | Mean    | SD     | t     | Significance |  |
| Low Self Esteem and High PSC | 114                           | 16.8596 |        | 3.210 | 0.001        |  |
| All others                   | 337                           | 15.2522 |        |       | 0.001        |  |
| Crounc                       | Appearance motive             |         |        |       |              |  |
| Groups                       | Group Size (n)                | Mean    | SD     | t     | Significance |  |
| Low Self Esteem and High PSC | 114                           | 9.0789  | 2.1125 |       | 0.000        |  |
| All others                   | 337                           | 7.9703  |        | 4.557 |              |  |

It is seen that people with low self-esteem and high public self-consciousness do have a higher consumption mean score (16.8596) compared to all others (15.2522) in the sample. The difference was found to be significant at 1%. Similarly in that group appearance motive also was found to be significantly (at 1%) higher compared to all others. It may be concluded that people of low self-esteem and high public self-consciousness are most susceptible to use of personal care products. This may be interpreted to mean that possibly self-esteem plays a moderating role in the relation between public self-consciousness and use of personal care products. This idea was verified by computing the correlation between public self-consciousness and use of personal care products at level of low self-esteem. The results of this analysis are provided in table given below.

Table 4.32. Correlation between Public self-consciousness and use of personal care products at low self esteem.

| Self Esteem | Correlation (Pearson) r | Significance (two tailed) |
|-------------|-------------------------|---------------------------|
| Low         | 0.235                   | 0.000                     |
| High        | 0.126                   | 0.073                     |

It may be seen that the correlation between public self-consciousness and use of personal care products is 0.235, which however is significant at 1%. Pursuant to this finding, it was decide to explore this further to identify the exact level of self-esteem where the correlation between public self-consciousness and use of personal care products is the highest. Respondents were reclassified into four groups based on their level of self-esteem. People whose self esteem scores were below the first quartile was placed in the 'low' group, those between first quartile and median in the 'moderately low' group, those with scores between median and third quartile in the 'moderately high' groups and finally these with scores above third quartile in the 'high' groups. Correlations between public self-consciousness and use of personal care products were computed separately for males and females. The results of the analysis are provided below in the table.

Table 4.33. Correlation between Public self-consciousness and Use of personal care products for various sub groups organized by gender.

|                 | M                       | ale                       | Female                  |                           |  |
|-----------------|-------------------------|---------------------------|-------------------------|---------------------------|--|
| Self Esteem     | Correlation (Pearson) r | Significance (two tailed) | Correlation (Pearson) r | Significance (two tailed) |  |
| Low             | 0.234                   | 0.056                     | 0.130                   | 0.277                     |  |
| Moderately Low  | 0.344                   | <b>24.20.008</b>          | 0.314                   | 0.026                     |  |
| Moderately High | -0.006                  | 0.963                     | 0.273                   | 0.112                     |  |
| High            | 0.102                   | 0.441                     | 0.117                   | 0.466                     |  |

It is clear from the table that the correlation between public self-consciousness and use of personal care products is highest in the case of people of moderately low self-esteem. The values of Pearson's r are 0.344 and 0.314 respectively for males and females. Further, it may be seen that the correlation is significant for males in this group at 1% and for females at 5%. Significant correlations are found only in this group which shows that self-esteem do have an influence on the relationship between public self-consciousness and use of personal care products. The increase in consumption with public self-consciousness is evident only in people of moderately low self-esteem.

## 4.6 Persuasibility and Use of personal care products

Consumer susceptibility to interpersonal influence (CSII) was taken as the surrogate variable to represent the factor that was interpreted as the persuasibility factor. Here CSII score is the sum of scores of two components namely the normative component and the informational component. The association between CSII and use of personal care products

was explored by computing the correlations between the two dimensions of CSII with the dependent variable, which is given below.

Table 4.34. CSII and Use of personal care products- Correlations

| CSII and Use of        | M     | ale                       | Female |       |  |
|------------------------|-------|---------------------------|--------|-------|--|
| personal care products |       | Significance (two tailed) |        |       |  |
| CSII-Normative         | 0.133 | 0.535                     | 0.029  | 0.684 |  |
| CSII-Informational     | 0.084 | 0.183                     | 0.104  | 0.145 |  |

It is evident that no significant correlations exist between the two different dimensions of CSII and Use of personal care products in either males or females. It may be inferred that CSII may not have any influence on Use of personal care products.

## Susceptibility to Television Advertising and Use of Personal Care Products

Advertising play a major role in promoting the use of personal care products especially through the television media. Therefore, the relation between susceptibility to television advertising and use of personal care products was analysed using correlations, which is given in table below.

Table 4.35. Susceptibility to Television Advertising and Use of personal care products- Correlations

| M                          | ale                       | Fe                         | male                      |
|----------------------------|---------------------------|----------------------------|---------------------------|
| Correlation<br>(Pearson) r | Significance (two tailed) | Correlation<br>(Pearson) r | Significance (two tailed) |
| 0.231                      | 0.032                     | 0.219                      | 0.035                     |

It may be seen that low but significant (at 5%) correlations exist between Susceptibility to Television Advertising and Use of personal care products. A hypothesis was formulated that Use of personal care products will be higher in those who have higher susceptibility to advertising which is stated below.

## Hypothesis 13

Persons who score high in susceptibility to television advertising use more of personal care products compared to those who lower.

The hypothesis was tested and the results are provided below.

Table 4.36 T test- Susceptibility to Television Advertising and Use of personal care products

| Susceptibility to      | 1                 | Use of per | sonal cai | re prodi | ıcts         |
|------------------------|-------------------|------------|-----------|----------|--------------|
| television advertising | Group<br>Size (n) | Mean       | SD        | t        | Significance |
| Low                    | 254               | 15.0354    | 4.4821    | <b>-</b> | 0.001        |
| High                   | 197               | 16.4619    | 4.7942    | 3.252    | 0.001        |

It is seen that the mean scores for use of personal care products are 15.0354 and 16.4619 respectively for the groups of low and high susceptibility to advertising. The difference is significant at 1%. The conclusion may be drawn that people who are more susceptible to advertising are also likely to use more personal care products.

### 4.7 Binary Logistic Regression

In order to obtain conclusive evidence for the influence of personality factors on the consumption of personal care products, it is important that the personality variables be used to predict the use of personal care products. In this regard binary logistic regression was used with the three factors identified as the independent variables along with gender as the independent categorical variable. The use of personal care products was divided into High and low (Heavy and Light half in terms of use) on median split and recoded accordingly.

## 4.7.1 Logistic Regression – an introduction

Logistic Regression is extensively used for prediction in consumer research because of its inherent advantages over ordinary Least Squares Regression. Logistic Regression enables the researcher to overcome many of the restrictive assumptions of ordinary least squares regression. Some of the advantages are given below.

- 1. Logistic regression does not assume a linear relationship between the dependents and the independents.
- 2. The dependent variable need not be normally distributed.
- 3. The dependent variable need not be homoscedastic for each level of the independents; that is there is no homogeneity of variance assumption.
- 4. Normally distributed error terms are not assumed.

- 5. Logistic regression does not require that the independents be interval scaled.
- 6. Logistic regression does not require that the independents be unbounded.

In problems involving consumer behaviour and personality, many of the strict assumptions of the ordinary least squares regression make its use limited. Therefore, use of logistic regression is extensively reported in consumer behaviour research.

In logistic regression, the dependent variable can takes two values and the two values are taken to mean the occurrence and non-occurrence of an event. The probability of the event occurring is given by the expression

$$P (event) = e^{Z} / 1 + e^{Z}$$

This expression can also be transformed as

P (event) = 
$$1/1 + e^{-Z}$$

Here Z is a linear combination of the independent variables given as:

$$Z = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + ... + B_n X_n$$

Where  $B_0$ ,  $B_1$  etc are coefficients and  $X_1$ ,  $X_2$  etc are the independent variables.

When the probability values are plotted against Z, an S curve is obtained which closely resembles the curve obtained when the cumulative probability of the normal distribution is plotted. The relationship between the probability and the independent variables is non linear and hence the parameters of the model are estimated using the maximum likelihood method by an iterative algorithm.

Once the parameters are computed the probability values are estimated and the classification is based on the probability of the event occurring. In the current model the dependent variable is the use of personal care products, which can take two values low and high. The event is defined the heavy use of personal care products and is coded as 1.00 compared to the light use coded as 0.00. If the probability value returned by the logistic regression procedure is above 0.5, the respondent is categorized as a heavy user and if the value is below 0.5 the categorization is as a light user. The predicted categories are compared with the observed to check the model.

However when the regression is expressed in the form  $P (event) = e^{Z} / 1 + e^{Z} where$ 

 $Z = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + ... + B_p X_p$ , it is very difficult to interpret the regression coefficients  $B_i$  meaningfully.

Therefore often the equation is transformed to represent the odds instead of the probabilities.

$$P (event) = e^{Z} / 1 + e^{Z}$$
 .....(1)

P (event not occurring) = 
$$1 - [e^{Z}/1 + e^{Z}] = 1 + e^{Z} - e^{Z}/1 + e^{Z} = 1/1 + e^{Z}$$
.....(2)

Odds for the event occurring is the ratio of the probability of the occurrence of the event to the non occurrence of the event.

Odds (event) = P (event) / P(event non Occurring) = 
$$[e^{Z}/1 + e^{Z}]/[1/1 + e^{Z}] = e^{Z}$$

If the log of the odds is taken (to the base e)

$$Log_e(odds) = Log_e\{P(event)/P(no event)\} = Z$$

Where 
$$Z = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + ... + B_p X_p$$

Here the logarithm of Odds is called Logit resulting in the name logistic regression.

Once the model is expressed as in terms of log odds, the logistic regression coefficients can be interpreted as the change in the log odds, associated with one unit change in the independent variable. Also the odds can be expressed as

Odds (event) = 
$$e^z = e^{B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + ... + B_p X_p} = e^{B_0} . e^{B_1 X_1} . e^{B_2 X_2} .... e^{B_p X_p}$$

Now e raised to the power  $B_i$  is the factor by which the odds change, when the i<sup>th</sup> independent variable increases by one unit. If  $B_i$  is positive, this factor will be greater than 1 – which means the odds are increased, and if  $B_i$  is negative the factor will be less than 1- which means the odds are reduced. If  $B_i$  is 0, then the odds are unchanged.

### 4.7.2 Variables and coding for Logistic Regression

### Dependent Variables

Use of personal care products

Table 4.37 Dependent Variable Encoding: logistic regression

| Original Value | Internal Value | Label      |
|----------------|----------------|------------|
| 1.00           | 0              | Light User |
| 2.00           | 1              | Heavy User |

# **Independent Variables**

Factor 1 : Self-Evaluation

Factor 2 Self-awareness

Factor 3 : Persuasibility

Gender : categorical variable

Table 4.38 Categorical variable encoding: Logistic regression

| Gender | Value | Frequency | Parameter<br>Coding |
|--------|-------|-----------|---------------------|
| Male   | 1.00  | 253       | 1.00                |
| Female | 2.00  | 198       | 0.00                |

## 4.7.3 Logit Results

The table given below provides a summary of the cases used in the analysis. All of 451 cases were used in the analysis since there were no missing values.

Table 4.39 Logit results summary of cases

| Cases                               | N   | Percent |
|-------------------------------------|-----|---------|
| Selected Cases Included in Analysis | 451 | 100.0   |
| Missing Cases                       | 0   | 0.0     |
| Total                               | 451 | 100.0   |
| Unselected Cases                    | 0   | 0.0     |
| Total                               | 451 | 100.0   |

#### Goodness of Fit

In any regression procedure it is very important to check the goodness of fit of the model. One of the common methods of determining the goodness of fit is by looking at how well the model classifies the observed data. A cross tabulation of the predicted group memberships with the observed is provided below.

Table 4.40 Classification Table

|                      |          | Predicted Use of Personal Care Products |      | Percentage<br>Correct |
|----------------------|----------|---|------|-----------------------|
| Observed             |          | Low                                     | High |                       |
| Use of Personal Care | Low      | 192                                     | 47   | 80.3                  |
| Products             | High     | 66                                      | 146  | 68.9                  |
| Overa                | all Perc | entage                                  |      | 74.9                  |

Here the probabilities are computed and classification is made based on these values. A respondent is categorized as a heavy user if the probability value is above 0.5 and a light user if the value is below 0.5. It is seen that the logistic regression procedure correctly classifies 74.9 % of the cases. Among the low users the percentage correct is 80.3% and among the heavy users it is 74.9%. A random classification will only produce 50 % accuracy while if all the cases are categorized as low users the percentage correct will be 53% only. If all the users are categorized as heavy users then the percentage correct will only be 47%. Here the logistic regression

procedure returns a classification scheme where 74.9% of the cases are correctly classified which may be taken as on the higher side. In consumer behaviour, since so many situational factors also influence the decision to use a product or not, an accuracy level of 74.9 % is very encouraging.

Another method to assess the goodness of fit is to examine how likely the sample results actually are given the parameter estimates. The probability of the observed results given the parameter estimates is termed the likelihood. Since the likelihood is a small number less than 1, it is customary to use -2 times the log likelihood commonly referred as -2LL as a measure of how well the estimated model fit the data. A good model is one where the likelihood is as high as possible which result in a low value for -2LL. In the computational algorithm involving iterations which is used by SPSS, -2LL is used as a measure to determine the solution where the iterations are stopped when the improvements (reduction) in -2LL reaches a given value (0.01%)

The logistic regression is conducted by initially taking in only the constant in the model and estimating the value of -2LL. The value of -2LL when only the constant is included in the model is given below in the Table.

Table. 4.41 Value of -2LL with only constant in the model

| Beginning Block Number 0. | Initial Log Likelihood Function |
|---------------------------|---------------------------------|
| -2 Log Likelihood         | 623.60138                       |

Constant is included in the model.

This value of -2LL is taken as a reference value to determine the improvements in solution when the variables are included and further iterations conducted. It is also possible to test different models by entering variables sequentially in steps. However in the current analysis all the variables were entered in step 1. The history of iterations is provided below.

Table 4.42 History of Iterations – Logistic Regression

| Iteration | -LL     | Constant | Factor1 | Factor2 | Factor3 | Gender<br>(Male) |
|-----------|---------|----------|---------|---------|---------|------------------|
| 1         | -244.69 | -0.96    | 0.13    | 0.39    | 0.14    | 1.91             |
| 2         | -242.89 | -1.10    | 0.18    | 0.53    | 0.19    | 2.21             |
| 3         | -242.87 | -1.12    | 0.18    | 0.55    | 0.19    | 2.24             |

Estimation terminated at iteration number 3 because Log Likelihood decreased by less than .01 percent.

In the table above the history of the iterations are provided once the variables, Factor 1, Factor 2, Factor 3 and the categorical variables Gender is entered together in the first step. It is seen that the marginal decrease in the 'LL' value shows a diminishing trend and the estimation is terminated at iteration 3 since the Log Likelihood decreased by less than 0.01%. At iteration 3 the value of -2LL will be 2x-242.87461 = 485.749, which is lower than the value for -2LL when only the constant is included in the model (623.60138). The values of B for each of the variables are also included in the table. The difference between the values of

-2LL for the model when all the variables are included and when only the constant is included is referred to as the Chi-Square, which is used

for testing the null hypothesis that the coefficients for all the terms in the current model  $(B_i)$  except the constant are zero. This test is similar to the overall F test used in least squares regression. The results of the test are provided below in table 4.11.

**Table 4.43 Significance of Model Coefficients** 

|       | Chi-square | df | Significance. |
|-------|------------|----|---------------|
| Step  | 137.852    | 4  | .000          |
| Block | 137.852    | 4  | .000          |
| Model | 137.852    | 4  | .000          |

The values of the chi-square, degrees of freedom and the significance are provided in the table for sep, block and model. Here since all the independents are entered in one step and one block all the values are same. The test is a comparison between the constant only model and the entire independents model. The resultant chi-squares value is significant and the null hypothesis may be rejected at 1% leading to the conclusion that the B values are indeed different from zero. However, the test is only useful for the model as such involving all the independents and it does not assure that every independent variable is significant.

In Logistic Regression, there is no widely accepted direct analog to the R<sup>2</sup> in Ordinary least squares regression. But there are R<sup>2</sup> like measures proposed two of the most commonly used measures are reproduced in the table below.

**Table 4.44 Model Summary** 

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|------|-------------------|----------------------|---------------------|
| 1    | 485.749           | .263                 | .352                |

The value of Cox and Snell R Square is 0.263 and that of Nagelkerke R Square is 0.352, which are reasonable as reported in various researches.

Another commonly used method to determine the overall goodness of fit of the logistic regression model is the Hosmer and Lemeshow's Goodness of Fit Test. This test is conducted by dividing the subjects into deciles based on predicted probabilities. Then the Chi Square is computed from the observed and expected frequencies in each group. The probability value is computed from the Chi Square distribution with 8 degrees of freedom. The null hypothesis, which is tested, is that there is no difference between the observed and expected values of the dependent. Normally for higher P values above 0.05, the null hypothesis is accepted indicating the goodness of fit of the model. The results of the test is provided in the table given below

Table 4.45 Hosmer and Lemeshow Test

| Step | Step Chi-square |   | Significance |  |
|------|-----------------|---|--------------|--|
| 1    | 12.927          | 8 | .114         |  |

Table 4.46 Contingency Table for Hosmer and Lemeshow Test

| Group | Use of Personal Care<br>Products- Low |          | Use of Personal Care<br>Products- High |          | Total |
|-------|---------------------------------------|----------|--|----------|-------|
|       | Observed                              | Expected | Observed                               | Expected |       |
| 1     | 40                                    | 39.577   | 5                                      | 5.423    | 45    |
| 2     | 30                                    | 36.603   | 15                                     | 8.397    | 45    |
| 3.    | 39                                    | 34.396   | 6                                      | 10.604   | 45    |
| 4     | 35                                    | 32.435   | 10                                     | 12.565   | 45    |
| 5     | 27                                    | 29.660   | 18                                     | 15.340   | 45    |
| 6     | 27                                    | 24.623   | 18                                     | 20.377   | 45    |
| 7     | 13                                    | 15.193   | 32                                     | 29.807   | 45    |
| 8     | 14                                    | 11.665   | 31                                     | 33.335   | 45    |
| 9     | 10                                    | 8.956    | 35                                     | 36.044   | 45    |
| 10    | 4                                     | 5.891    | 42                                     | 40.109   | 46    |

The probability value is computed from the Chi Square distribution with 8 degrees of freedom. From the table, it is seen that the Chi square value is 12.927 and the p- value is 0.114, which indicates that logistic regression model is a good fit. This is because the test is used to test the null hypothesis that there is no difference in the observed and predicted values of the dependent variable, which is the use of personal care products. The P – value obtained is 0.114 which is greater than 0.05. which would suggest that the null hypothesis may not be rejected, implying that model's estimate fit an acceptable fit.

The test of significance of each independent variable in the model is done using the Wald statistic, which has a Chi Square distribution. When the variable is having a single degree of freedom, the Wald statistic is

obtained as the square of the ratio of the coefficient  $(B_i)$  to its standard error. The null hypothesis, which is tested, is that the coefficient  $(B_i)$  is zero. However, Wald statistic is not considered as a very reliable measure. The table showing the Wald Statistic, and significance along with the coefficients  $(B_i)$  and the exponents  $(e^x)$  are provided in the table below.

Table 4.47 Coefficients and significance of variables

| factors      | В      | S.E. | Wald   | df | Significance. | Exp(B) |
|--------------|--------|------|--------|----|---------------|--------|
| Factor 1     | .182   | .112 | 2.610  | 1  | .046          | 1.199  |
| Factor 2     | .545   | .119 | 21.071 | 1  | .000          | 1.725  |
| Factor 3     | .191   | .112 | 2.923  | 1  | .042          | 1.211  |
| Gender(Male) | -2.237 | .233 | 92.092 | 1  | .000          | .107   |
| Constant     | 1.119  | .172 | 42.084 | 1  | .000          |        |

It is seen that only Factor 2 and gender are significant at 1%. But all the variables are seen to be significant at 5%.

The regression equation can be written as below.

Odds(event) = 
$$e^{Z} = e^{1.119 + 0.182xFactor1 + 0.545xFactor2 + 0.191xFactor + -2.237(gender=1)}$$

The last column provides the  $e^B$  values, which are the increase or decrease in odds with unit change in the independent variable controlling the other variables. The change in odds is highest in the case of Gender followed by factor 2. In the case of factor 2, a unit increase will increase the odds by a factor of 1.725 or there is a 72.5% increase in the odds. Similarly when gender is male instead of female, the odds for the user being a heavy user of

personal care products get reduced by a factor of 0.107 equivalent to a percent decrease of 89.3%.

This increase is in terms of odds in the sense that the Exp (B) values are multipliers of the original odds.

Binary logistic regression resulted in an accuracy rate of 74.9 %. Since consumption may be influenced by a large number of other factors, this is considered extremely promising. In terms of the personality factors, self-awareness contribute, the highest followed by self-evaluation and persuasibility having similar coefficients. Gender is also an important determinant as consumption is significantly higher in females. The procedure is used here only to provide an evidence of the suitability of the model and not to develop specific process parameters regarding the specific relationships.

### **CHAPTER 5**

### **DISCUSSION OF FINDINGS**

Consumption is a complex phenomenon. Like many aspects of human behaviour, consumption also defies rational approaches that are successfully used to study phenomena from the physical sciences. Studies of consumer behaviour have used inputs from a variety of academic areas like economics, psychology, anthropology, to name a few, to understand consumption from a macro as well as a micro view point. Typically research in consumer behaviour seeks to answer questions like who, what, where, when, how and why? The first five are relatively easy to answer and the modernism or positivism is the theoretical approach followed. However, the answer to the question why is rather difficult to find out. There may be any number of reasons that make an individual purchase a product and many of the reasons collectively influence the purchase decision. Often the consumers themselves may not consciously understand the true reason or even if they do, may not always be prepared to disclose them. There is also a lot of error inherent in measurement and clear patterns may not be obtained in the analysis. However even with these limitations, immense strides have been made over the last few decades in understanding consumer behaviour especially the consumer decision making.

There are several typologies suggested to conceptualise the variety of decisions making seen in consumer behaviour. It is understood that there

is no single one explanation but many depending on the context of decision. Howard and Sheth(1969) distinguished between extended problem solving, limited problem solving and routinized response behaviour and linked the schema to psychological schema of concept learning, concept attainment and concept utilization. Baumgartner (2002) suggested that a variety of reasons may be there for consumption which may be classified into eight distinct form of purchase behaviour. Extended purchase decision-making is purchase based on objective, logical criteria and for utilitarian reasons. Symbolic purchase behaviour is buying a brand to project a certain image or because it meets with social approval. Repetitive purchase behaviour - this is making routine purchase or buying some thing since one is habituated and may be loyal to that. Hedonic purchase behaviour is buying some thing just because one likes it. Promotional purchase behaviour – this is buying some thing because it is available on sale or some sales promotion schemes are available. Exploratory purchase behaviour is buying some thing out of curiosity or because of a desire for variety. Impulsive purchase behaviour is the last category, which is purchasing some thing on impulse. These eight purchase types are based on three underlying dimensions. The first dimension is thinking versus feeling depending on whether a purchase motive is functional or psychosocial. The second dimension is understood as low versus high purchase involvement depending on the degree of care required by a purchase or the amount of time and effort expended in the purchase. The

final dimension is spontaneous versus deliberate based on how much prior planning goes into the purchase and how much previous experience the consumer has with the purchase.

All this demonstrates the variety of reasons, motives and processes associated with the consumer decision to purchase and use a product. There cannot a simple scheme that explains consumer behaviour. In every purchase, several motives and reasons can be there, some rational some not and modelling the consumer decision is enormously complex. It is in this context that the findings of the study are interpreted.

The research was undertaken to study the individual differences in the consumption of personal care products and relate them to personality variables to come up with an understanding of the links between the personality factors that determine the decisions to purchase and use these products.

A personal care product may be defined as any of several preparations (except soap) that are applied to the human body for beautifying, preserving, or altering the appearance or for cleansing, colouring, conditioning, or protecting the skin, hair, nails, lips, eyes, or teeth. The products were talcum powder, shampoo, fairness creams, moisturizing cream, moisturizing lotions, deodorants and perfumes. What makes one consume these products? There can be several reasons and motive, but one

common characteristic of personal care products is that they are applied externally to the human body for beautifying, preserving or alerting the physical appearance. What is important here is the appearance of the body. The society emphasizes the importance of appearance and there are ideals of beauty, which is internalised by people. The media also plays a major role here by propagating idealized images of human body.

The researcher tried to explain the use of personal care products with the help of personality variables and used social comparison theory as a frame of reference. All people compare themselves with ideal images (in this case with regard to their physical appearance and beauty) and these upward comparisons put them at a disadvantage. People as a result tend to undervalue themselves and feel anxious and this might lead them to take actions to bridge the gap between their perceived self and the perceived ideal. Use of personal care products can be a specific behavioural out come resorted to bridge this gap. But this need not be the only strategy available or used by the individuals who suffer from unrealistic comparisons with the social ideal with respect to their appearance and beauty. There can be selfdefensive or self-protective strategies adopted (Cast and Burke 2002) by reasoning that appearance is not important, working to create an impression, which is more positive about them, or distorting the comparison by comparing to people who are worse off. Some may also show a learned helplessness or may attribute the cause to external and uncontrollable factors like destiny.

It will be wrong to assume that all people who suffer from the upward comparisons with respect to their appearance and beauty resort to the use of personal care products. Again not all people who are users of personal care products can be assumed to suffer from upward comparisons leading to feelings of anxiety and insufficiency. However, some people are more likely to have poor evaluations about self and some of such people are likely to seek personal care products as a method of improving their appearance. What are the personality-correlates of such people? Several personality variables were included in the study based on dimensions of the self and their relationships were explored both among each other as well as with the dependent variable. Here two aspects of the self were considered namely the self-evaluation and the self-awareness and personality factors related to these two aspects were included in the study. Further persuasibility was another concept, which may be related to consumption of low involvement products such as personal care products. In today's market place, all commercial organizations are trying their best to persuade the consumers and their success depends on how well they are able to persuade the consumers. It will be reasonable to assume that people who are more perusable are likely to buy more of personal care products. Variables that are from the conceptual domain of persuasibility were also therefore included in the study. In

addition, data was collected on demographic variables and consideration was given to the effect of such variables in the analysis.

### 5.1 Summary of Findings

- Significant differences were observed in the use of personal care products across gender. Females were found to consume more of personal care products.
- 2. Income was not found to have any significant effect on the consumption of personal care products.
- 3. The factor analysis produced a three-factor solution and the factors were interpreted as self-evaluation, self-awareness and persuasibility.
- 4. Self-esteem was found to be associated with an internal locus of control and high risk taking.
- People of low self-esteem were found to have higher social anxiety, higher appearance anxiety, lower consumer self-confidence and lower body esteem.
- 6. People of low self-esteem scored higher on social embarrassment
- 7. There was no relationship between self-esteem and consumption
- 8. High public self-consciousness was found to be related to higher appearance motive and higher consumption of personal care products.

- Low self-esteem and high public self-consciousness subjects were found to consume significantly more of personal care products compared to all others.
- 10. The correlation between public self-consciousness and use of personal care products was found to be highest and significant only in the case of moderately low self-esteem.
- 11. Susceptibility to television advertising was found to be related with use of personal care products.
- 12. Binary logistic regression using factor scores corresponding to self-evaluation, self-awareness, persuasibility and gender predicted almost 75% of the cases correctly and all the parameters of the regression were significant.

### 5.2 Discussion

A large number of specific findings were obtained in the work many of which are supported by the earlier research. They are concerning the independent variables among each other and with the gender. However, the emphasis in the research was on the interaction of personality factors that may explain differences in consumption. Several theories were reviewed and a theoretical model was proposed with three constructs self-evaluation, self-awareness and persuasibility posited to be linked to consumption of personal care products. These constructs were measured indirectly by personality

variables and factor analysis revealed expected structure among the variables being grouped into three clusters as posited. Surrogate variables were used to test relationships between the factors. The discussion of findings is done with a specific focus on the model and the basic personality factors.

It was posited that three factors are likely to influence the consumption of personal care products. They were self-evaluation, self-awareness and persuasibility. Several individual difference variables were included in the study related to these factors. An exploratory factor analysis revealed a three-factor structure as expected. The interpretation of the factors was done based on the relative factor loadings.

The first factor was interpreted as the component of the self dimension that include evaluation of oneself. Self-esteem, consumer self confidence, body esteem and locus of control show positive factor loadings to this dimension whereas the anxiety variables, both social anxiety and appearance anxiety show high negative loadings. A person who score high on this dimension will show high self esteem, high self confidence, and an internal locus of control while scoring low on appearance anxiety and social anxiety. This reveals that that the person has high self worth, consider himself a master of his destiny, is confident of his decisions while less susceptible to anxieties. This can be interpreted as evidence of autonomy in behaviour and decision-making. In addition, this is the dimension to which three of the variables self-esteem, body esteem and consumer self-confidence

as positively loaded. All the three variables are indicative of self-evaluation.

Therefore, factor one shows the characteristic of self-evaluation.

Factor two is a composite of Public Self Consciousness and appearance motive. An individual who score high on this dimension is conscious of his public image -what others perceive about him. He is also motivated to improve his public persona that is particularly his or her appearance. Here the individual's personality is more oriented to the impressions he forms about what he thinks others perceive about him. This dimension is conceptually very similar to the public-self dimension described in the self-perception theory. Public self-consciousness is a construct derived in the self-awareness domain and appearance motive is a concern to improve the self since one is consciously aware of the self. Factor two was therefore interpreted to be the self-awareness, which may be defined as the awareness of the self as a social object.

Three variables namely normative and interpersonal dimensions of Customer Susceptibility to Interpersonal Influence and the Susceptibility to Television Advertising showed high positive loadings to the third factor. This is to be expected since all the three are different aspects of the susceptibility to influence construct. McGure (1968) had posited a general trait of influencibility and the current findings are consistent with the theoretical view that measures of this construct may show consistent relationships. Factor three was interpreted as persuasibility.

Therefore, the three factors were interpreted and named as selfevaluation, self-awareness and persuasibility.

#### 5.2.1Self-Evaluation

The construct of self-evaluation is described in research as a motive for social comparison (Festinger 1954, Martin and Kennedy 1994) along with other motives namely self-improvement and self-enhancement. The original theme of the social comparison theory referred to the tendency among people to engage in social comparisons with similar others to evaluate himself. However there are many studies reported extend this view from comparisons to similar others to comparisons with ideal models. Martin and Kennedy (1993, 1994), Richins (1991, 1992) Bearden and Rose (1990) all used this perspective and used social comparison to explain marketing phenomena. In all these studies, the emphasis was not on comparisons with similar others, but upward comparisons with better others, possibly the images of ideal propagated by the media. These comparisons on self-relevant dimensions may have an influence on one's self-esteem and feelings (Wood, 1989) and the most likely impact of the upward comparisons are to the detriment of self-esteem (James 1989). One may develop negative selffeelings and poor self-perceptions may result. Martin and Kennedy (1993) and Richins(1991) suggested that often upward comparisons with unattainable ideal media images represented by the advertising models may result in changes of self-perception of attractiveness. Richins (1992)

suggested that social comparisons today are often unsought and is with the media images since advertising and entertainment media images are pervasive. Since most of these images are idealized, the comparisons are always upwards and the comparer finds himself deficient with respect to the comparison standard.

Richins (1992) further added that if the comparison domain is important to the individual, the deficiency resulting from the comparison with idealized images leads to negative self-feelings. Higgins (1987) and James (1989) had suggested that the negative self-feelings are motivating and people strive to eliminate the negative feelings and repair their sense of self-worth. One of the strongest responses to the negative feelings associated with a comparison discrepancy is to increase efforts to reduce the gap. Carver and Scheier (1981) and Duval and Wicklund (1972) posited this view. Richins (1992) suggested that one way of doing this is by means of consumption. Here consumption is an act to bridge the gap between self and perceived ideal.

In all these, self-evaluation is treated as a motive for social comparison and poor self-evaluation as an outcome of comparison with better others. If poor self-evaluation is the result of social comparison, then pre-existent poor self-evaluation may increase the chances of an individual suffering from upward comparisons. The pre-existent poor self-evaluation is often conceptualised as self-esteem. In the present study, also self-esteem was found to have the highest factor loadings with the self-evaluation factor.

There is a lot of evidence that pre-existent poor self evaluation manifested as poor self-esteem is an antecedent of eating disorders quite common in western cultures. Here the common explanation suggested is that people of low self-esteem are likely to suffer from upward comparisons with idealized media images and the motive to bridge the gap result in dieting and fitness regimen. Advertising and portrayal of thin body as attractive in the media are hypothesized to facilitate upward comparison. Prendergast (1998), Myers and Biocca (1992), Martin and Kennedy (1993), Stephen et.al (1994), Stice et.al (1994) supported this view.

Poor self-evaluation is also related to choice of cosmetic surgery, hair removal among women and fashion preferences (Schouten 1991, Tiggerman 1998, Rose et al 1998) all of them pointing to the phenomena by which people are trying to bridge the gap between their self and the reference standard of attractiveness.

In the study, it was found that a poor self-evaluation characterized by a poor self-esteem is related to a number of variables. People of low self-esteem were found to have higher social anxiety, higher appearance anxiety and lower body esteem. They also rated minor physical and appearance deficiencies as more embarrassing. They are likely to have an external locus of control are less risk taking and do have lower confidence as consumers. The general pattern that emerges from these relationships is that people of low self-esteem have poorer self-perceptions show more anxiety and

consider minor physical deficiencies to be socially embarrassing. This makes such a group susceptible to the use of products that are aimed at improving one's appearance. It was also found that such people are more susceptible to the normative influence that determines the appropriateness of consumption. Therefore, it was hypothesized that people of poor self-evaluation are likely to choose personal care products. Here it was expected that similar to the phenomena by which people of low self-esteem choose dieting, cosmetic surgery and hair removal to conform with the social norm, they may use personal care products to improve their appearance motivated by feelings of inferiority.

However, the hypothesis had to be rejected since there were no significant differences observed in the consumption of personal car products between people of low and high self-esteem. This was contrary to the expectations as the researcher expected that evidence related to eating disorders, cosmetic surgery and hair removal indicate a generalizable tendency for people of poor self-evaluation to suffer in upward comparisons, develop negative self feelings that act as a motive to shape behaviour.

Though people of low self-esteem have higher anxieties, have lower body esteem indicative of a poor self-image, are more influencible and even consider minor bodily deficiencies as socially embarrassing, not all of them us personal care products as a remedy.

### 5.2.2. Self-Awareness

Self-awareness is another aspect of the self considered in the study which refers to the awareness of self as a social object. Burnkrant and Page (1982) reviewed several studies on self-awareness in consumer behaviour and noted that self-awareness may influence product choice. Wegener and Wallacher (1980) commented that self-awareness lead to a self regulation process that controls the intensity and direction of ongoing behaviour. Specifically, self-attention is presumed to evoke a matching to standards process, whereby the person conforms to whatever he or she takes as the standard of appropriate behaviour. The greater is the self-awareness, the greater is the correspondence to behavioural standards. Therefore self-awareness also determine social comparison and people who have a high degree of self-awareness are likely to have a tendency to conform to the comparison standards they have.

Fenigstein, Scheier and Buss (1975) also studied the construct of self-awareness. They posited that that self-examination and self-awareness enable a person to recognize his conscious thoughts, motives and defences. They conceptualised self-consciousness as an individual difference variable related to the self-awareness. Self-consciousness is defined as a consistent tendency of people to direct attention inward or outward. They differentiated self-awareness as a state while self-consciousness is an individual difference.

Self-awareness not only include a personal reflection on one's self, but an awareness of perceptions of others also. People who have heightened self-awareness are more likely to be conscious of their public self-image and would try to create a better impression on others Burnkrant, and Page (1982). Personal care products promise an improvement in appearance and has a public dimension. They are products for impression management. Therefore, individual differences in self-awareness may explain differences in consumption also. In the present study, public self-consciousness was taken as a variable representing the self-awareness (Fenigstein, Scheier and Buss, 1975)

Cheek and Briggs (1982) proved that public self-consciousness was linked to impression management or overt displays. Empirical evidence indicates that the public self-consciousness and the concern for impression management are related constructs, both involving a desire to protect one's public image (Schlenker 1980). Therefore, public self-consciousness can be posited to be related to self-alteration or self improvement. Since personal care products are used heavily in order to effect an improvement in one's social image, it is reasonable to expect that people of high public self-consciousness are likely to be heavy users of such products. Burnkrant and Page (1982) citing works of Fenigstein (1979) and Scheier (1980) suggested that it is very likely for some people to be more sensitive than others to the impressions called for or likely to be rewarded in social situations. These

people are more inclined than others to present an image of themselves that would lead to the desirable impression in these situations. They concluded that it is reasonable to expect, but has never been shown, that people who score highly on public self-consciousness would also be more inclined than low scorers to use consumer goods to create favorable impressions. Turner et al (1978) had also reached the same conclusion that people of high public self-consciousness are likely to be particularly concerned with their social appearance and impressions they make on others.

Turner, Guililand and Klein (1981) had posited that publicly self conscious individuals have more well defined physical attractiveness self schema than their less conscious counterparts and they therefore respond more quickly to evaluative judgments of their appearance, This make them more attentive to their physical image. Various research studies reported that high public self-consciousness individuals engage in behaviours like extensive make up use to enhance their physical appearance (Cash and Cash 1982; Lypson, Przybyla and Byrne 1983; Miller and Cox 1982)

It is also reported that public self-consciousness particularly characterizes of appearance-schematic women who maintain strong beliefs regarding the importance of physical appearance in one's life (Cash and Labarge 1996) and these women have displayed preferential attention towards processing appearance related information (Labarge, Cash and Brown 1998).

All this evidence point out the link between self-awareness as measured by public self-consciousness and consumption of appearance related products like personal care products.

In the study, it was found that public self-consciousness and appearance motive load positively on the same factor labelled as self-awareness. Further, they showed a strong and significant positive correlation to each other. Appearance motive was found to be significantly higher in those with high public self-consciousness.

In addition, the consumption of personal care products was found to be significantly higher in people of high public self-consciousness as expected.

# 5.2.3. Moderating role of self Evaluation in the relation between self awareness and consumption

Now self-evaluation and self-awareness are two orthogonal dimensions and their primary measures self-esteem and public self-consciousness were found to be uncorrelated. The researcher attempted to explain the results taking self-evaluation as having a moderating effect on the relationship between public self-consciousness and use of personal care products.

It was found that self-esteem do have an influence in the relationship between public self-consciousness and use of personal care products. People of low self-esteem and high public self-consciousness were found to use more of personal care products than all others in the sample. This may be interpreted as follows. Poor self-evaluation though leading to negative feelings of body and its attractiveness may not result in consumption by itself. But in the presence of public self-consciousness, the specific behavioural outcome is observed that is the use of personal care products. A poor self-esteem is indicative of poor self-evaluation and such people have more anxieties regarding their appearance. They value their body less as measured by lower scores on body esteem. This may be because of the social comparison. But the negative feelings are not translated to consumption. The necessary condition for such people to show specific behaviour of consumption is high level of public self-consciousness. Also the impact of public self-consciousness on consumption is more pronounced in the case of people of low self-esteem.

The important determinant of consumption is self-awareness, which is a conscious knowledge of the self as perceived by others. If people are self-aware they are likely to concerned about their appearance, and this is seen in all. But in people who have poor self-evaluation, the pattern is stronger.

It was found that the correlation between public selfconsciousness and consumption was highest in people of moderately low self-esteem and only in that group, the correlation was found to be significant. It is therefore reasonable to conclude that self-evaluation moderate the relation between self-awareness and consumption of personal care products. People who are most vulnerable to consumption is that group with poor self-evaluation indicated by low self-esteem and high level of self-awareness as indicated by high public self-consciousness.

### 5.2.4 Persuasibility

Persuasibility or susceptibility to persuasion is conceptualised as an individual difference variable. Some people are easily persuaded than others and this tendency is a stable behavioural disposition across situations. These were numerous efforts to measure persuasibility, but it is felt that a general construct of persuasibility do not have a great deal of explanatory power and therefore specific measures were developed in marketing for use in research. Consumer susceptibility to interpersonal influence (CSII) and Susceptibility to television advertising are two such measures. Bearden, Netemeyer and Teel (1989) developed and tested an instrument to measure Consumer Susceptibility to Interpersonal Influence called CSII having two dimensions namely normative and informational. Barr and Kellaris (1997 and 2000) focused on the medium of television and specifically developed the construct in the domain of television advertising (STA)

One is influenced considerably from others in consumption. This may be from relevant others or even the reference group influences from the media. It was posited that people who are more persuasible are likely to use more of personal care products. But the research revealed that the relationship is only there in the case of susceptibility to advertising. People who are more susceptible to advertising were found to be heavy users of personal care products. This evidence also supports indirectly the role of media in facilitating social comparison.

No gender differences were observed in the relationships linking self-evaluation, self-awareness and use of personal care products. The similar pattern of results were obtained in both males and females.

It may be concluded that there is some evidence regarding the validity of the theoretical model suggested. The three aspects of self-awareness, self evaluation and persuasibility represented by the variables self-esteem, public self-consciousness and susceptibility to advertising explain some differences in the consumption. Here public self-consciousness is directly related to consumption and this effect is moderated by self-esteem. STA is also related but not linked to the other variables.

Using factor scores for the three factors, researcher had conducted a binary logistic regression analysis to predict the use of personal care products. Success rate of 74.9 percent was obtained which is reasonably high

in a consumption context. All the factors and the gender were found to be significant. This finding also support the theoretical model proposed that the three factors identified namely self-evaluation, self awareness and persuasibility explain and predict differences in consumption.

### **CHAPTER 6**

### CONCLUSIONS AND IMPLICATIONS

#### 6.1 Conclusions

This research was undertaken with the primary objective of explaining differences in consumption of personal care products using personality variables. Several streams of research reported were reviewed and a conceptual model was developed. Theories on the relationship between self concept and behaviour was reviewed and the need to use individual difference variables to conceptualize and measure the salient dimensions of the self were emphasized. Theories relating to social comparison, eating disorders, role of idealized media images in shaping the self-concept, evidence on cosmetic surgery and persuasibility were reviewed in the study. These came from diverse fields like social psychology, use of cosmetics, women studies, media studies, self-concept literature in psychology and consumer research, and marketing. From the review three basic dimensions, namely self-evaluation, self-awareness and persuasibility were identified and they were posited to be related to consumption. Several personality variables from these conceptual domains were identified and factor analysis confirmed the expected structure fitting the basic theoretical dimensions. Demographic variables like gender and income were also considered.

It was found that self-awareness measured by the variable public self-consciousness explain differences in consumption of personal care products. The relationship between public self-consciousness and consumption was found to be most conspicuous in cases of poor self-evaluation measured by self-esteem. Susceptibility to advertising also was found to explain differences in consumption.

From the research, it may be concluded that personality variables are useful for explaining consumption and they must be used together to explain and understand the process. There may not be obvious and conspicuous links between individual measures and behaviour in marketing. However, when used in proper combination and with the help of theoretical models personality offers considerable explanatory power as illustrated in the seventy five percent accuracy rate of prediction obtained in binary logistic regression.

### **6.2 Implications**

The practical implications from marketer's point of view is the identification of a segment which has a personality profile of low self esteem and high public self consciousness who are most susceptible to the use of personal care products. However, it should also be noted that there are other segments that may have to be approached using different methods since it does not mean that all users are of poor self-evaluation and high self-awareness and develop negative self perceptions of attractiveness as a result

of social comparisons. There are also the implications for public policy where certain segments of the populations being vulnerable to the marketing tactics in the case personal care products.

From a methodological perspective, it is important to note that the consumption may not be explained by single measures in isolation. One needs to consider several variables and use a proper theoretical framework to help explain consumption. Further, though individual measures may not be related to specific behavioural aspects like the preference for a product or a brand and its purchase, there is a collective effect of several variables on the aggregated behaviours which serve to cancel out the situational variation. There should also be an emphasis on theoretical models that provide a logical explanation than being restricted by the use of largely atheoretical models and empirical validation. Another point worth emphasizing is the need to study the moderating effect of variables. Even if the variables are uncorrelated, there may be interactions between them on determining the dependent variable, which need to be explored.

From the perspective of theory, it is worth noting that numerous studies have already been undertaken in the west exploring the influence of self esteem on body image, body esteem and appearance anxiety. It is suggested that people of low Self-Esteem have a poor body image, lower body esteem and higher social and appearance anxiety compared to those with high Self-Esteem. This group is more prone to eating disorders like

Anorexia nervosa and Bulimia. This study expand the scope of generalizations possible in this area by relating consumption of personal care products with self esteem and public self-consciousness albeit defining self-esteem as having a moderating effect on the relation between public self-consciousness and consumption.

### 6.3 Scope for further research

The present research reported offer some evidence on the relationship between personality variables and consumption but limited to personal care products that serve an appearance related function. Though there is reasonable evidence, there is need to confirm the relationships by extending the research to other age groups and socio-demographic classes. In addition, it is felt that the predictive value of the model can be improved further by dropping some variables and adding other variables on which there is research evidence concerning the link with consumption. Personal vanity (Netemeyer, Burton and Lichtenstein) and consumer materialism (Richins 1990and 1992) are such variables. Also the researcher would like to verify experimentally the link between advertising, self evaluation and self awareness.

### REFERENCES

- Abdullah, T M. "Self-Esteem and Locus of Control of College Men in Saudi Arabia." Psychological Reports 65 (1989): 1323-1326.
- 2. Ajzen, Icek, and Martin Fishbein. *Understanding Attitudes and Predicting Social Change*. NJ: Prentice Hall, 1980.
- 3. Albanese, Paul J. "Personality and Consumer Behaviour: An Operational Approach." *Advances in Consumer Research* 1 (1993): 513-517.
- 4. Allport, G W. Personality. NewYork: Holt, 1937.
- 5. Allport, G W., and H S. Odbert. "Trait Names: A Psycho-Lexical Study." *Psychological Monographs* 47 (1936): 211.
- 6. Argyle, M. Social Interactions. New York: Atherton press, 1969.
- 7. Atkinson, J W. "Motivational Determinants of Risk Taking Behaviour."

  Psychological Review 64 (1957): 359-372.
- 8. Barr, T F., and J J. Kellaris. "Susceptibility to Television Advertising:

  A note on Its Measurement and Impact." Proceedings of the Society for

  Consumer Psychology 1996 Summer Conference Toronto Ontario,

  American Psychology Association 1 (1997): 102-105.
- 9. Barr, Terry F., and James J. Kellaris. "Susceptibility to Advertising:

  An Individual Difference Variable with Implications for the

- Processing of Persuasive Messages." Advances in Consumer Research 27 (2000): 230-234.
- 10. Baumgartner, Hans. "Toward a Personology of the Consumer." *Journal of Consumer Research* 29 (2002): 286-292.
- 11. Bearden, W O., R G. Netemeyer, and J E. Teel. "Measurement of Consumer Susceptibility to Interpersonal Influence." *Journal of Consumer Research* 15 (1989): 473-481.
- 12. Bearden, William O., D M. Hardesty, and R L. Rose. "Consumer Self-Confidence: Refinements in Conceptualisation and Measurement."

  Journal of Consumer Research 28 (2001): 121-133.
- Bearden, William O., and Etzel J. Michael. "Reference Group Influence on Product and Brand Purchase Decisions." *Journal of Consumer* Research 9 (1982): 183-194.
- 14. Bearden, William O., and Randall L. Rose. "Attention to Social Comparison Information-an Individual Difference Factor Affecting Consumer Conformity." *Journal of Consumer Research* 16 (1990): 162-168.
- 15. Bednar, R, M Wells, and S Peterson. Internal and External Feedback:

  Basic Assumptions, Self-Esteem: Paradoxes and Innovations in Clinical

- Theory and Practice. Washington DC: American Psychological Association, 1980.
- 16. Belk, Russel W. "Extended Self and Extending Paradigmatic Perspective." Journal of Consumer Research 16 (1989): 129-132.
- 17. --- R.W. "Possessions and the Extended Self." *Journal of Consumer Research* 15 (1988): 139-168.
- 18. ---R.W. "Situational Variables and Consumer Behaviour." *Journal of Consumer Research* 2(3) (1975): 157-164.
- Belk, Russel W., and Mark Austin. Organ Donation: Willingness as a
   Function of Extended Self and Materialism. Advances in Health Care.
   Ed. M Venkatesan, and Scott Smith. Provo, UT: Association for Consumer Research, 1986. 84-88.
- 20. Belk, Russel W., Kenneth D. Bahn, and Robert N. Mayer.
  "Developmental Recognition of Consumption Symbolism." Journal of Consumer Research 9 (1982): 4-17.
- 21. Bell, C. "Situation Assessment of Prepositional Networks and Knowledge Structures in Body: Relevant Information Processing." Unpublished Doctoral Dissertation, Vanderbilt University, Nashville(1991): 120-125. Cited in Prendergast (1998)

- 22. Benassi, V A., P D. Sweeney, and C L. Dufour. "Is There a Relationship Between Locus of Control Orientation and Depression."
  Journal of Abnormal Psychology 97 (1988): 729-750.
- 23. Berman, Ronald. Advertising and Social Change. Beverly Hills, CA: Sage, 1981.
- 24. Berscheid, Ellen, Ellaine Hartfield, and G Bohrnstedt. "The Happy American Body a Survey Report." *Psychology Today* 7 (1973): 119-131.
- Bettman, James R., Harold H. Kassarjian, and Richard J. Lutz.
   Consumer Behaviour. Review of Marketing. Chicago: American
   Marketing Association, 1978. 194-239.
- 26. Blascovich, J, and J Tomaca. Measures of Self Esteem. In Measures of Personality and Social Psychological Attitudes. Ed. J P. Robinson, P R. Shaver, and L S. Wrightsman. Sandiego, CA: Academic Press, 1991.
- 27. Brannigan, C G., P A. Hank, and J A. Guay. "Locus of Control and Day Dreaming." *Journal of Genetic Psychology* 152 (1991): 29-33.
- 28. Brinberg, David, and Linda Plimpton. "Self Monitoring and Product Conspicuousness on Reference Group Influence." Advances in Consumer Research 13 (1986): 297-300.
- 29. Brislin, Richard W., and Steven A. Lewis. "Dating and Physical Attractiveness -a Replication." *Psychological Reports* 22 (1968): 976-984.

- 30. Brockner, J. "The Effects of Self-Esteem, Success, Failure and Self-Consciousness on Task Performance." *Journal of Personality and Social Psychology* 37 (1979): 1732-1741.
- 31. Brown, T A., T F. Cash, and S W. Noles. "Perceptions of Physical Attractiveness Among College Students: Selected Determinants and Methodological Matters." *Journal of Social Psychology* 126 (1986): 305-316.
- 32. Bruner, J S., and H Tajfel. "Cognitive Risk and Environmental Change." *Journal of Abnormal Social Psychology* 62 (1961): 231-241.
- 33. Burnkrant, Robert E., and Thomas J. Page Jr.. "On the Management of Self Image in Social Situations; the Role of Public Self-consciousness."

  Advances in Consumer Research 9 (1982): 452-455.
- 34. Carver, C S., and M F. Scheier. "Self-Focusing Effects of Dispositional Self-Consciousness: Mirror Presence and Audience Presence." *Journal of Personality and Social Psychology* 36 (1978): 324-332.
- 35. Cash, T F. "Does Beauty Make a Difference." CIFA Cosmetic Journal 12 (1980): 24-28.
- 36. ---F. "The Psychology of Cosmetics: A Research Bibliography."

  Perceptual and Motor Skills 66 (1988): 455-460.

- 37. ---F. The Psychology of Physical Appearance: Aesthetics, Attributes and Images. Body Images: Development, Deviance and Change. Ed. T. F. Cash, and T. Pruzinsky. New York: Guilford, 1990. 51-79.
- 38. Cash, T.F., and D.W. Cash. "Women's Use of Cosmetics: Psycho Social Correlates and Consequences." *International Journal of Cosmetic Sciences* 4 (1982): 1-14.
- 39. Cash, T F., et al. "The Effects of Cosmetic Use on the Physical Attractiveness and Body Image of College Women." Journal of Social Psychology 129 (1989): 349-356.
- 40. Cash, T F., and L F. Janda. "Eye of the Beholder." *Psychology Today* 18.12 (1984): 46-52.
- 41. Cash, T F., and A S. Labarge. "The Development of the Appearance Schemas Inventory; a New Cognitive Body Image Assessment."

  Cognitive Therapy and Research 20 (1996): 37-50.
- 42. Cash, T.F., J. Rissi, and R. Chapman. "Not Just Another Pretty Face: Sex Roles Locus of Control and Cosmetics Use." *Personality and Social Psychology Bulletin* 11 (1985): 246-257.
- 43. Cash, T F., and J M. Wunderle. "Self-Monitoring and Cosmetic Use Among College Women." *Journal of Social Behaviour and Personality* 4 (1987): 563-566.

- 44. Cecil, H, and M A. Stanley. "Reliability and Validity of Scores on the Body-Esteem Scale." *Educational and Psychological Measurement* 57 (1997): 340-356.
- 45. Chaiken, H. "Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion." *Journal of Personality and Social Psychology* 39 (1980): 752-766.
- 46. Cheek, J M., and S R. Briggs. "Self-Consciousness and Aspects of Identity." *Journal of Research in Personality* 16 (1982): 401-407.
- 47. Cohen, A. R., and I. L. Janis. Some Implications of Self-Esteem for Social Influence. Personality and Persuasibility. Ed. C. I. Hovland. 1st ed. New Haven, Conn:: Yale University Press, 1959.
- 48. Cohen, Joel B. "An Over-Extended Self." Journal of Consumer Research 16 (1989): 125-128.
- 49. Cote, Joseph A., and Ronald M. Buckley. "Measurement Error and Theory Testing in Consumer Research: An Illustration of the Importance of Construct Validation." *Journal of Consumer Research* 14 (1988): 579-587.
- 50. Cox, Donald, and Raymond A. Bauer. "Self-Confidence and Persuasibility in Women." *Public Opinion Quarterly* 28 (1964): 453-466.

- 51. Crosby, A, and S L. Grosbart. "A Blue Print for Consumer Behaviour Research in Personality." Advances in Consumer Research 11 (1984): 447-482.
- 52. Davis, Caroline, Howard Brewer, and Marc Weinstein. "A Study of Appearance Anxiety Among Young Men." Social Behaviour and Personality 21.1 (1993): 63-74.
- 53. Debraubander, b, and C Boone. "Sex Differences in Perceived Locus of Control." *Journal of Social Psychology* 130 (1990): 271-272.
- 54. Duval, S, and R A. Wicklund. A Theory of Objective Self-Awareness.

  New York: Academic Press, 1972.
- 55. Duval, S, and R A. Wicklund. "Effects of Objective Self Awareness on Attribution of Causality." *Journal of Experimental Social Psychology* 9 (1973): 17-31.
- 56. Eysenck, H J., W Arnold, and R Meili. *Encyclopedia of Psychology*. vol. 2. 1st ed. Bungay, Suffolk: Fontana/Collins, 1975. 973.
- 57. Fenigstein, A. "Self-Consciousness, self Attention and Social Interaction."

  Journal of Personality and Social Psychology 37.1 (1979): 75-86.
- 58. Fenigstein, A, M F. Scheier, and A H. Buss. "Public and Private Self-Consciousness: Assessment and Theory." *Journal of Consulting and Clinical Psychology* 43 (1975): 522-527.

- 59. Festinger, L. "A Theory of Social Comparison Processes." Human Relations 7.99 (1954): 117-140.
- 60. Findley, M J., and H M. Cooper. "Locus of Control and Academic Achievement: A Literature Review." *Journal of Personality and Social Psychology* 44 (1983): 419-427.
- 61. Fischer, Seymour. Development and Structure of the Body Image.

  Hillsdale, NJ: Earlbaum, 1986.
- 62. Folk, L, J Pedersen, and S Cullaris. "Body Satisfaction and Self-concept of Third and Sixth Grade Students." *Perceptual and Motor Skills* 76 (1993): 547-553.
- 63. Foxall, Gordon R., and Ronald E. Goldsmith. "Personality and Consumer Research: Another Look." *Journal of the Marketing Research Society* 30 (1989): 111-125.
- 64. Franzoi, S L. "Further Evidence of the Reliability and Validity of the Body-Esteem Scale." *Journal of Clinical Psychology* 50 (1994): 237-239.
- 65. Franzoi, S L., and S A. Shields. "The Body-Esteem Scale:

  Multidimensional Structure and Sex Differences in College

  Population." Journal of Personality Assessment 48 (1984): 173-178.
- 66. Galbraith, John K. The New Industrial State. Boston: Houghton Mifflin, 1967.

- 67. Garner, David M., et al. "Cultural Expectations of Thinness in Women." *Psychological Reports* 47 (1980): 483-491.
- 68. Gibbons, F X. "Self-Attention and Self Report: The "veridicality" Hypothesis." *Journal of Personality* 51 (1983): 517-542.
- 69. Goldberg, L R. "Man Vs Model of Man: A Rationale Plus Some Evidence for a Method of Improving on Clinical Inference." Psychological Bulletin 73 (1970): 422-432.
- 70. Gollob, H, and J Dittes. "Different Aspects of Manipulated Self-Esteem on Persuasibility Depending on the Threat and Complexity of the Communication." *Journal of Personality and Social Psychology* 2 (1965): 195-201.
- 71. Green, P.E., and V.R. Rao. "Configurational Synthesis in Multidimensional Scaling." *Journal of Marketing Research* 91 (1972): 65-68.
- 72. Guiney, Kathryn M., and Nancy E. Furlong. "Correlates of Body Satisfaction and Self-Concept in Third and Sixth Graders." *Current Psychology* 18.4 (2000): 353-368.
- 73. Hair, Joseph F., Ralph E. Anderson, and R L. Tatham. *Multivariate Data Analysis*. 2nd ed. New York: Macmillan, 1987.

- 74. Hakmiller, K L. "Need for Social Evaluation: Perceived Similarity and Comparison Choice." *Journal of Experimental and Social Psychology Supplement 1* 1 (1966): 49-54.
- 75. ---L. "Threat as a Determinant of Downward Comparison." Journal of Experimental and Social Psychology Supplement 1 1 (1966): 32-39.
- 76. Hamburger, Annette C. "Beauty Quest." *Psychology Today* 22(5) (1988): 29-32.
- 77. Haugtvedt, C, et al. "Personality and Ad Effectiveness: Exploring the Utility of Need for Cognition." Advances in Consumer Research 15 (1993): 209-212.
- 78. Hechhausen, J, and R Schulz. "A Life Span Theory of Control."

  Psychological Review 102 (1995): 284-304.
- 79. Henkel, Ramon E. *Tests of Significance*. Sage Paper Series on Quantitative Applications in the Social Sciences. Vol. 07. Newbury Park, CA: Sage, 1976.
- 80. Hicran, Cavusoglu. "Self-Esteem in Adolescence- a Comparison of Adolescents with Diabetes Mellitus and Leukemia." *Pediatric Nursing* 27.4 (2001): 355-361.
- 81. Hirschman, Elizabeth C. "People as Products: Analysis of a Complex Marketing Exchange." *Journal of Marketing* 51 (1987): 98-108.

- 82. Horwath, Theodore. "Correlates of Physical Beauty in Men and Women." Social Behaviour and Personality 7(2) (1979): 145-151.
- 83. Hovland, C I., and I L. Janis. *Personality and Persuasibility*. New Haven, Conn:: Yale University Press, 1959.
- 84. Howard, John A., and Jagdish N. Sheth. *The Theory of Buyer Behaviour*. New York: John Wiley, 1969.
- 85. Ickes, W, R A. Wicklund, and C B. Ferris. "Objective Self Awareness and Self Esteem." *Journal of Experimental Social Psychology* 9 (1973): 202-219.
- 86. James, William. *The Principles of Psychology*. vol. 1. New York: Henry Holt, 1890.
- 87. ---M. Psychology: The Briefer Course. Cambridge, MA: Harvard University Press, 1984.
- 88. Janis, Irving L. "Personality Correlates of Persuasion." *Journal of Personality* 22(1) (1954): 504-518.
- 89. Jordan, B, and Kathlyn Bryant. "The Advertised Couple; the Portrayal of the Couples and Their Relationship in Popular Magazine Advertisements. "Paper Presented at the Popular Culture Association and American Culture Association Meetings, Pittsburgh April 28, 1979 Cited in Richins (1992) 1 (1979): 202-206.

- 90. Kass, N. "Risk in Decision Making as a Function of Age, Sex and Probability Preference." Child Development 35 (1964): 577-582.
- 91. Kassarjian, Harold, and Mary J. Sheffet. *Personality and Consumer Behaviour- An Update*. Perspectives in Consumer Behaviour. Ed. Harold Kassrjian, and T Robertson. 4th ed. Englewood Cliffs, NJ: Prentice Hall, 1981. 281-303.
- 92. Kenrick, D T., and S E. Guirres. "Contrast Effects and Judgments of Physical Attractiveness: When Beauty Becomes Social Problem." Journal of Personality and Social Psychology 38 (1980): 131-140.
- 93. Kenrick, D T., S E. Guirres, and L L. Goldberg. "Influence of Popular Erotica on Judgments of Strangers and Mates." *Journal of Experimental Social Psychology* 25 (1989): 159-167.
- 94. Killian K, K D. "Fearing Fat, a Literature Review of Family Systems:

  Understanding and Treatment of Anorexia and Bulimia." Family

  Relations 43 (1994): 311-318.
- 95. Philip. Marketing Management Analysis, Planning, Implementation and Control. 8th ed. Englewood Cliffs, NJ: Prentice Hall, 1994.
- 96. Labarge, A S., T F. Cash, and T A. Brown. "Use of Modified Stroopmask to Examine Appearance Schematic Information Processing in College Women." *Cognitive Therapy and Research* 22 (1998): 191-199.

- 97. Lanyon, Richard I., and Leonard D. Goodstein. *Personality Assessment*.

  New York: John Wiley and Sons, 1971. 24-26.
- 98. Lefcourt, H M. Locus of Control: Current Trends in Theory and Research. 2nd ed. Hillsdale, NJ: Erlbaum, 1982.
- 99. Lefcourt, H M., et al. "Locus of Control for Affiliation in Social Interactions." *Journal of Personality and Social Psychology* 48 (1988): 755-759.
- 100. Levy, Sidney J. "Symbols for Sale." Harvard Business Review 37 (1959): 117-124.
- 101. MacBride, Sean. Many Voices, One World: Communication and Society: Today and Tomorrow. New York: Unipub(UNESCO), 1980.
- 102. Markus, Hazel, and Paula Nurius. "Possible Selves." American

  Psychologist 11 (1986): 954-969.
- 103. Martin, Andrew J., and Raymond L. Debus. "Alternative Factor Structure for the Revised Self-Consciousness Scale." *Journal of Personality Assessment* 72(2) (1999): 266-281.
- 104. Martin, Mary C., and Patricia F. Kennedy. "Social Comparison and the Beauty of Advertising Models: The Role of Motives for Comparison." Advances in Consumer Research 21 (1994): 365-371.

- 105. Mcguire, William J. Personality and Susceptibility to Social Influence.
  Handbook of Personality Theory and Research. Ed. Edgar F. Borgotta,
  and William W. Lambert. Chicago: Rand Mcnally, 1968. 1130-1187.
- 106. McLuhan, Marshall. The Mechanical Bride. Boston: Beacon, 1951.
- 107. Mehtha, Raj, and Russel Belk. "Artifacts, Identity and Transition-Favorite Possessions of Indians and Indian Immigrants to the United States." *Journal of Consumer Research* 17 (1991): 398-411.
- 108. Miller, Carol L., and Cathryn L. Cox. "For Appearance Sake: Public Self-Consciousness and Makeup Use." Personality and Social Psychology Bulletin 8 (1982): 748-751.
- 109. Miller, L C., and C L. Cox. "For Appearance Sake: Public Self-Consciousness and Make Up Use." *Personality and Social Psychology Bulletin* 8 (1982): 748-751.
- 110. Mischel, Walter. Personality and Assessment. New York: Wiley, 1968. 78-146.
- 111. Mooradian, Todd A., and James M. Olver. "Neuroticism, Affect and Post Purchase Processes." *Advances in Consumer Research* 21 (1994): 595-600.
- 112. Morgan, Amy J. "The Evolving Self in Consumer Behaviour: Exploring Possible Selves." *Advances in Consumer Research* 20 (1993): 429-432.

- 113. Moses, N N., and S S. Sundar. "Perceptual Effects of Race and Weight of Models in Magazine Advertisements on the Body-Self Concept of Afro-American Women." Paper Presented at the McNair Conference, University Park, Pennsylvania State University, August 1-3 1999 and the McNair's Journal (1999): 1.
- 114. Netemeyer, Richard G., Scott Burton, and Donald Lichtenstein. "Trait Aspects of Vanity: Measurement and Relevance to Consumer Behaviour." *Journal of Consumer Research* 21 (1995): 612-626.
- 115. Noles, S W., T F. Cash, and B A. Winstead. "Body Image, Physical Attractiveness and Depression." *Journal; of Consulting and Clinical Psychology* 53 (1985): 88-94.
- 116. Norman, W T. "Toward an Adequate Taxonomy of Personality Attributes: Replicated Factor Structure in Peer Nomination Personality Ratings." Journal of Abnormal and Social Psychology 66 (1963): 574-583.
- 117. Norusis, Marija. SPSS/PC+ User's Manual. Chicago: SPSS Inc, 1992.
- 118. Norwicki, S, and B R. Strickland. "A Locus of Control Scale for Children." *Journal of Consulting Psychology* 40 (1973): 148-154.
- 119. Onkvisit, Sak, and Jones Shaw. "Self Concept and Image Congruence:

  Some Research and Managerial Issues." *Journal of Consumer Marketing* 4 (1987): 13-23.

- 120. Park, Whan C., and Parker V. Lessig. "Students and Housewives:

  Differences in Susceptibility to Reference Group Influence." Journal of

  Consumer Research 4 (1977): 102-110.
- 121. Peterson, R. "Bulemia and Anorexia Nervosa in an Advertising Context." *Journal of Business Ethics* 25 (2003): 495-504.
- 122. Peterson, Robert A., Gerald Albaum, and Richard F. Beltramini. "A Meta-Analysis of the Effect Sizes in Consumer Behaviour Experiments." *Journal of Consumer Research* 12 (1985): 97-103.
- 123. Petty, R E., and J T. Cacioppo. Attitudes and Persuasion: Classic and Contemporary Approaches. Dubuque, Iowa: WmC Brown, 1981.
- 124. Pollay, Richard W. "The Distorted Mirror: Reflections on the Unintended Consequences of Advertising." *Journal of Marketing* 50 (1986): 18-36.
- 125. Prendergast, Gerard P. "Psychology, Marketing and Eating Disorders :Integrating Evidence from the Literature." Asia Pacific Advances in Consumer Research 3 (1998): 120-125.
- 126. Rholes, W S., M Jones, and C Wade. "A Developmental Study of Learned Helplessness." *Developmental Psychology* 16 (1980): 616-624.

- 127. Rich, M K., and T F. Cash. "The American Image of Beauty: Media Representations of Hair Colour for Four Decades." Sex Roles 29 (1993): 103-114.
- 128. Richins, Marsha L. "Media Images, Materialism and What Ought to Be:

  The Role of Social Comparison." Advances in Consumer Research 8

  (1992): 202-206.
- 129. ---L. "Social Comparison and the Idealized Images of Advertising."

  Journal of Consumer Research 18 (1991): 71-83.
- 130. Rosenberg, M. Society and the Adolescent Self Image. Princeton, NJ: Princeton University Press, 1965.
- 131. Rosenberg, Morris. Conceiving the Self. New York: Basic Books, 1979.
- 132. Rotter, J B. "Generalized Expectancies for Internal and External Control of Reinforcement." *Psychological Monographs* 80 (1966): (whole no 609).
- 133. ---B. "Some Problems and Misconceptions Related to the Construct of Internal Versus External Control of Reinforcement." Journal of Consulting and Clinical Psychology 43 (1975): 56-57.
- 134. Ruckman, R M., and M X. Malikiosi. "Relationship Between Locus of Control and Chronological Age." *Psychological Reports* 36 (1975): 655-658.

- 135. Sandell, R G. "Effects of Attitudinal and Situational Factors on Reported Choice Behaviour." *Journal of Marketing Research* 4(4) (1968): 405-408.
- 136. Sauer, Pamela. "Makeover for Personal Care Products (industry Trends)." *Chemical Market Reporter* 5.1 (2001): 325-334.
- 137. Scheier, M.F. "Effects of Public and Private Self-Consciousness on the Public Expression of Personal Beliefs." *Journal of Personality and Social Psychology* 39.3 (1980): 514-521.
- 138. Scheier, M F., and C S. Carver. "Self Focused Attention and Experience of Emotion: Attraction, Repulsion, Elation and Depression." *Journal of Personality and Social Psychology* 35 (1977): 625-636.
- 139. Scheier, M.F., C.S. Carver, and F.X. Gibbons. "Self-Directed Attention, Awareness of Bodily States and Suggestibility." *Journal of Personality and Social Psychology* 37 (1979): 1576-1588.
- 140. Scheier, M S., A Fenigstein, and A H. Buss. "Self Awareness and Physical Aggression." *Journal of Experimental Social Psychology* 10 (1974): 264-273.
- 141. Schiffman, Leon G., and Leslie L. Kanuk. *Consumer Behaviour*. 3rd ed. Englewood Cliffs, NJ: Prentice Hall, 1987.

- 142. Schlenker, B R. Impression Management in the Self-Concept, Social Identity, and Interpersonal Relations. Monterey, CA: Brooks/Kole, 1980.
- 143. Schouten, John W. "Selves in Transition: Symbolic Consumption in Personal Rites of Passage and Identity Reconstruction." *Journal of Consumer Research* 17 (1991): 412-425.
- 144. Scodel, A, P Ratoosh, and J S. Minas. "Some Personality Correlates of Decision Making Under Conditions of Risk." *Behavioural Sciences* 4 (1959): 19-28.
- 145. Silverman, J. "Self-Esteem and Differential Responsiveness to Success and Failure." *Journal of Applied Social Psychology* 69 (1964): 115-119.
- 146. Sirgy, Joseph M. "Self Concept in Consumer Behaviour-a Critical Review." *Journal of Consumer Research* 9 (1982): 287-300.
- 147. Sirgy, Joseph M., and J S. Johar. "Value Expressive Versus Utilitarian Advertising Appeals: When and Why to Use Which Appeal." *Journal of Advertising* 20 (1991): 23-33.
- 148. Slovic, P. "Convergent Validation of Risk Taking Measures." *Journal of Abnormal Social Psychology* 65 (1962): 68-71.
- Pay Offs in Risk Taking." Journal of Experimental Psychology

  Monographs 78 (1968): No 3, part 2.

- 150. Stafford, James E. "Effects of Group Influence on Consumer Brand Preferences." *Journal of Marketing Research* 32 (1966): 68-75.
- 151. Stephen, D, R Hill, and C Hansen. "The Body Myth and the Female Consumer: The Controversial Role of Advertising." *Journal of Consumer Affairs* 28.99 (1994): 137-150.
- 152. Stephens, D, R Hill, and C Hansen. "The Beauty Myth and Female Consumer: The Controversial Role of Advertising." *Journal of Consumer Affairs* 28.137-150 (1994): 137-150.
- 153. Stice, E, and H E. Shaw. "Adverse Effects of the Media Portrayed Thin Ideal on Women and Linkages to Bulimic Symptmology." *Journal of Clinical and Social Psychology* 2 (1994): 73-81.
- 154. Strickland, B R. "Internal-External Control Expectancies: From Contingencies to Creativity." *American Psychologist* 44 (1989): 1-12.
- 155. Strickland, B R., and W E. Haley. "Sex Differences on the Rotter I-E Scale." *Journal of Personality and Social Psychology* 82 (1980): 263-268.
- 156. Thornton, B. "Physical Attractiveness Contrast Effect and the Moderating Influence of." Sex Roles- A Journal of Research 3 (1999): 35-48.
- 157. Thornton, B, and S Moore. "Physical Attractiveness Contrast Effect:

  Implications for Self-Esteem and Evaluations of the Social Self."

  Personality and Social Psychology Bulletin 19 (1993): 474-480.

- 158. Thornton, Dorothy, and John A. Arrowwood. "Self-Evaluation, Self-Enhancement and the Locus of Control in Social Comparison." *Journal of Experimental and Social Psychology Supplement* 1 (1966): 40-48.
- 159. Tiggerman, Marika. "Hairlessness Norm: The Removal of Body Hair in Women." Sex Roles 12 (1998): 28-36.
- 160. Turner, R G., L Gilliland, and H M. Klein. "Self-Consciousness, Evaluations of Physical Characteristics and Physical Attractiveness." Journal of Research in Personality 15 (1981): 182-190.
- 161. Turner, R G., et al. "Correlates of Self-consciousness." Journal of Personality Assessment 42(3) (1978): 285-289.
- 162. Wegener, D.M., and R.R. Valacher. *The Self in Social Psychology*. New York: Oxford University Press, 1980.
- 163. Wheeler, Ladd. "Motivation as a Determinant of Upward Comparison."

  Journal of Experimental and Social Psychology Supplement 1 (1966):

  27-31.
- 164. Wicklund, R A. Objective Self-Awareness. Advances in Experimental Social Psychology. Ed. L Berkowitz. vol. 9. New York: Academic press, 1975.

- 165. Wiggins, Jerry S., Nancy N. Wiggins, and Judith C. Conger.

  "Correlates of Heterosexual Somatic Preferences." Journal of

  Personality and Social Psychology 10 (1968): 82-90.
- 166. Wood, Joanne V. "Theory and Research Concerning Social Comparison of Personal Attributes." *Psychological Bulletin* 106.2 (1989): 231-248.
- 167. Worchel, Stephen, and Joel Cooper. *Understanding Social Psychology*.3rd ed. Homewood, Illinois: The Dorsey Press, 1983. 110-111.

# **APPENDICES**

# APPENDIX 1 INSTRUCTIONS

# Dear Respondent,

A set of statements and questions about different situations are provided below. Please respond to them using the following scale.

If your answer is a FIRM NO or NEVER TRUE in your case or if you STRONGLY DISAGREE give a score of 1.

If your answer is a FIRM YES or ALMOST ALWAYS TRUE in your case or if you STRONGLY AGREE give a score of 4.

You may choose 1,2, 3 or 4 but not answer using any decimals. Please mark your answer by circling the appropriate number. It is very important that you answer all questions.

### **APPENDIX 2**

## **SELF-ESTEEM ITEMS**

- 1. On the whole, I am satisfied with myself.
- 2. At times I think I am no good at all.
- 3. I feel I do not have much to be proud of.
- 4. I certainly feel useless at times.
- 5. I wish I could have more respect for myself.
- 6. I can market myself with no difficulty
- 7. I know where I am going in my life
- 8. Most people around me seem to be better off than I am.
- 9. I see myself as someone special and worthy of other people's attention and affection.
- 10. I will never be as capable as I should be

. 205

## **APPENDIX 3**

## **RISK TAKING ITEMS**

- 1. Would you prefer a job involving change, travel and variety even though the job is insecure?
- 2. When the odds are against you, do you still feel it is worth taking a chance?
- 3. Would life with no danger in it be too dull for you?
- 4. Would you enjoy fast driving?
- 5. Do you find that you have sometimes crossed a road leaving more careful companions on the other side?
- 6. Does driving a fast car or jet airplane appeal to you?
- 7. Are you willing to try anything once.
- 8. Do you seek adventure.
- 9. Do you like doing crazy things.
- 10. Do you often think you know how to get around the rules.

#### LOCUS OF CONTROL ITEMS

- 1. I usually get what I want in life.
- 2. It is better to be smart rather than lucky
- 3. The success I have is largely a matter of chance.
- 4. It is not important for me to vote.
- 5. My life seems like a series of random events.
- 6. Whether or not people like me depends on how I behave
- 7. I earn the respect and honours I receive.
- 8. Leaders are successful when they work hard.
- 9. Some people are just born lucky?
- 10. What happens to me is my own doing
- 11. In the long run people get the rewards for their efforts in this world.
- 12. When I get what I want it is usually because I worked hard for it.
- 13. Becoming successful in life is a matter of hard work, luck has little or nothing to do with it.
- 14. When I get what I want, it is usually because I am lucky

#### **PUBLIC SELF-CONSCIOUSNESS ITEMS**

- 1. I care a lot how I present myself to others.
- 2. I am self conscious about the way I look.
- 3. I usually worry about making a good impression.
- 4. Before I leave my house, I check how I look.
- 5. I am concerned about what other people think of me
- 6. I am usually aware of my appearance.

# APPENDIX 6 SOCIAL ANXIETY ITEMS

- 1. It takes time for me to get over shyness in new situations.
- 2. I find it easy to talk to strangers.
- 3. I feel nervous when speaking in front of a group.
- 4. I am easily embarrassed
- 5. Large groups make me nervous

#### **APPEARANCE ANXIETY ITEMS**

- 1. I am a physically attractive person.
- 2. I feel confident of my appearance.
- 3. When I look in the mirror I feel good about my body.
- 4. I feel comfortable with my looks.
- 5. I am concerned about my looks.
- 6. I think I am good looking.
- 7. I think I do not have an attractive body.
- 8. I am not concerned about my appearance.
- 9. I am considered attractive by others.
- 10. I attract attention from the opposite sex.
- 11. I am conscious of my appearance.
- 12. I some times wonder what others think of my looks.
- 13. I am concerned with how others evaluate my looks.
- 14. I am concerned about how my body appear to others

### **APPEARANCE MOTIVE ITEMS**

- 1. It is really important to me that I keep myself good looking.
- 2. I am motivated to devote time and effort to improve my appearance.
- 3. I have a strong desire to keep myself good looking.

## CONSUMER SUSCEPTIBILITY TO INTERPERSONAL INFLUENCE (CSII)- ITEMS

#### **Normative Dimension**

- I achieve a sense of belonging by purchasing the same products and brands others purchase.
- 2. If other people can see me using a product, I often purchase the brand they expect me to buy.
- 3. When buying products, I generally purchase those brands that I think others will approve of.
- 4. I often identify with other people by purchasing the same products and brands they purchase.
- 5. If I want to be like someone, I often try to buy the same brands that they buy.
- 6. It is important that others like the products and brands I buy.
- 7. I like to know what brands and products make good impressions on others.
- 8. I rarely purchase the latest fashion styles until I am sure my friends approve of them.

# CONSUMER SUSCEPTIBILITY TO INTERPERSONAL INFLUENCE (CSII)- ITEMS

#### Informational Dimension

- 1. I often consult other people to help choose the best alternative available from a product class.
- 2. I frequently gather information from friends or family about a product before I buy.
- 3. If I have little experience with a product, I often ask my friends about the product.
- 4. To make sure I buy the right product or brand, I often observe what others are buying and using.

## **CONSUMER SELF CONFIDENCE(CS) – ITEMS**

- 1. I know where to find the information I need prior to making a purchase.
- 2. I know where to look to find the product information I need.
- 3. I am confident in my ability to recognize a brand worth considering.
- 4. I trust my own judgment when deciding which brands to consider.
- 5. I often have doubts about the purchase decisions I make.
- 6. I often wonder if I have made the right purchase selection.
- 7. My friends are impressed with my ability to make satisfying purchases.
- 8. I impress people with the purchases I make
- 9. I know when an offer is too good to be true.
- 10. I can tell when an offer has strings attached
- 11. I find it difficult to say "no" to a salesperson.
- 12. I am hesitant to complain when shopping

## SUSCEPTIBILITY TO TELEVISION ADVERTISING (STA) – ITEMS

- 1. Television advertising makes me aware of products I need
- 2. Television commercials provide me with important information regarding products that are advertised.
- 3. Television ads tell me which brand of products is the best to buy
- 4. I watch television commercials because they tell me about products I need.
- 5. Television advertising is sometimes exaggerated; therefore I am reluctant to purchase a product based solely on the ad
- 6. I pay little attention to television advertisements when I am planning a purchase.

## APPENDIX 13 L SCALE- ITEMS

- 1. I gossip a little at times
- 2. Once in a while I laugh at a dirty joke.
- 3. Once in a while I think of things too bad to talk about.
- 4. I do not always tell the truth.
- 5. Once in a while I put off till tomorrow what I ought to do today.

## USE OF PERSONAL CARE PRODUCTS-INSTRUCTIONS AND MEASUREMENT

Please indicate how often you use the following products. Please use the following options to mark your answer by circling the appropriate number.

- 1. A regular user- Use it almost every day
- 2. Frequent User- Use it 2 to 3 times a week
- 3. Occasional User- Use it may be 2 or 3 times a month on occasions like marriages, parties etc.
- 4. Non User- never or very rarely uses it.

#### **Products Listed**

- 1. Talcum Powder
- 2. Shampoo
- 3. Fairness Cream
- 4. Moisturizing Cream
- 5. Moisturizing Lotions
- 6. De Odorants
- 7. Perfumes

## BODY ESTEEM SCALE – INSTRUCTIONS AND ITEMS

A number of body features and aspects are listed below. Please read each item and indicate how you feel about it in your case using the following scale.

1. Have strong negative feelings - Very dissatisfied

2. Have moderate negative feelings - Somewhat dissatisfied

3. Have moderate positive feelings - Somewhat satisfied

4. Have strong positive feelings - Very Satisfied

1. Nose

2. Body Scent

3. Physical Fitness

4. Body Shape

5. Body Hair

6. Face

7. Weight

8. Height

9. Skin Texture

10. Complexion (Skin Colour)

11. Hair

- 12. Teeth
- 13. Breath
- 14. Perspiration
- 15. Eyes
- 16. Nails
- 17. Hands
- 18. Palms
- 19. Lips

## APPENDIX 16 SOCIAL EMBARRASSMENT

#### Instructions and items

Many people feel that some physical characteristics may cause social embarrassment. Some such physical characteristics are given below. Please indicate whether according to you these may lead to social embarrassment. Use the following scale.

- 1- Not at all embarrassing
- 2- Relatively Less Embarrassing
- 3- Somewhat Embarrassing
- 4- Very Embarrassing

- 1. Baldness
- 2. Dandruff
- 3. Dry Skin
- 4. Pimples/Acne
- 5. Bad Breath
- 6. Lack of Height
- 7. Oily Skin
- 8. Body Odour
- 9. Dark Skin
- 10. A thin body
- 11. Overweight

